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11/12/04

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&lt;210&gt; 5232

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

BEST AVAILABLE COPY

&lt;400&gt; 5232

Met Thr Leu Arg Pro Ser Leu Leu Pro Leu His Leu Leu Leu Leu Leu

1

5

10

15

Leu Leu Ser Ala Ala Val Cys Arg Ala Glu Ala Gly Leu Glu Thr Glu

20

25

30

Ser Pro Val Arg Thr Leu Gln Val Glu Thr Leu Val Glu Pro Pro Glu

35

40

45

Pro Cys Ala Glu Pro Ala Ala Phe Gly Asp Thr Leu His Ile His Tyr

50

55

60

Thr Gly Ser Leu Val Asp Gly Arg Ile Ile Asp Thr Ser Leu Thr Arg

65

70

75

80

Asp Pro Leu Val Ile Glu Leu Gly Gln Lys Gln Val Ile Pro Gly Leu

85

90

95

Glu Gln Ser Leu Leu Asp Met Cys Val Gly Glu Lys Arg Arg Ala Ile

100

105

110

Ile Pro Ser His Leu Ala Tyr Gly Lys Arg Gly Phe Pro Pro Ser Val

115

120

125

Pro Ala Asp Ala Val Val Gln Tyr Asp Val Glu Leu Ile Ala Leu Ile

130

135

140

Arg Ala Asn Tyr Trp Leu Lys Leu Val Lys Gly Ile Leu Pro Leu Val

145

150

155

160

Gly Met Ala Met Val Pro Ala Leu Leu Gly Leu Ile Gly Tyr His Leu

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170

175

Tyr Arg Lys Ala Asn Arg Pro Lys Val Ser Lys Lys Lys Leu Lys Glu

180

185

190

Glu Lys Arg Asn Lys Ser Lys Lys Lys

195

200

&lt;210&gt; 5233

&lt;211&gt; 2801

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5233

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&lt;210&gt; 5234

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5234

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			20				25					30			
Ile	Ile	Ser	Lys	Glu	Thr	Pro	Pro	Pro	Pro	Arg	Leu	Ile	Phe	Lys	Lys
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Leu	Ala	Val	Pro	Val	Val	Pro	Ala	Thr							
	50					55									

&lt;210&gt; 5235

&lt;211&gt; 3017

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5235

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1680



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3017

&lt;210&gt; 5236

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5236

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Ala	Glu	Met	Asp	Leu	Gly	Thr	Pro	Thr	Tyr	Asp	Glu	Asn	Pro	Met	Lys
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Ala	Ser	Lys	Lys	Pro	Lys	Thr	Ala	Glu	Ala	Asp	Thr	Ser	Ser	Glu	Leu
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Ala	Lys	Lys	Ser	Lys	Glu	Val	Phe	Arg	Lys	Glu	Met	Ser	Gln	Phe	Ile
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Tyr	Met	Gln	Lys	Phe	Gly	Ala	Val	Tyr	Lys	Pro	Lys	Glu	Asp	Thr	Glu
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Leu	Glu														

&lt;210&gt; 5237

&lt;211&gt; 1238

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5237

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&lt;210&gt; 5238

&lt;211&gt; 212

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5238

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	35						40					45			
Leu	Glu	Ala	Arg	Ser	His	Met	His	Leu	Ala	Ser	Ala	Phe	Ala	Gly	Ile
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His	Pro	Leu	Val	Pro	His	Gly	Leu	Ser	Val	Val	Leu	Thr	Ser	Pro	Ala
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Val	Phe	Thr	Phe	Thr	Ala	Gln	Met	Phe	Pro	Glu	Arg	His	Leu	Glu	Met
	115						120					125			
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Val	Asp	Asp	Gly	Leu	Ala	Ala	Val	Gly	Tyr	Ser	Lys	Ala	Asp	Ile	Pro
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Ala	Leu	Val	Lys	Gly	Thr	Leu	Pro	Gln	Glu	Arg	Val	Thr	Lys	Leu	Ala
	180							185					190		
Pro	Arg	Pro	Gln	Ser	Glu	Glu	Asp	Leu	Ala	Ala	Leu	Phe	Glu	Ala	Ser
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 actcgagtcc gctagccgct gccgccacct ccctctacca ctgcctccc cactccccga  
 2040  
 ccgggcccccc tccccccgcg g  
 2061

&lt;210&gt; 5240

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5240

Met Met Ser Ser Ser Met Thr Arg Ile Ser Pro Ser Leu Glu Leu Ala  
 1 5 10 15  
 Ser Pro Ser Trp Leu Val Ser Val Leu Pro Thr Ser Leu Leu Ser Leu  
 20 25 30  
 Ser Ala Gly Gly Thr Pro Ser Gly Cys Thr Val Ala Gly Gly Leu Gly  
 35 40 45  
 Ala Ser Gly Gly Val Gly Ser Thr Gly Thr Gly Ala Ser Pro Pro Thr  
 50 55 60  
 Thr Val Ala Ile Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser  
 65 70 75 80  
 Ser Ser Glu Ser Val Ser Leu Gly Gly Ala Trp Gly Gly Pro Gly Gly  
 85 90 95  
 Gly Ser Leu Ser Pro Arg Ser Ala Phe Phe Asn Phe Arg Phe Leu Leu  
 100 105 110  
 Phe Leu Ile Arg Asp Leu Phe Ser Pro Ser Pro Gly Val Gly Arg Gly  
 115 120 125  
 Leu Arg Ser Thr Pro Lys Pro Ala Pro Ala Pro Gly Pro Asn Phe Arg  
 130 135 140  
 Phe Phe Arg Ser Phe Phe Arg Gly Gly Trp Glu Arg Ser Pro Trp Glu  
 145 150 155 160  
 Arg Gly Thr Gly Val Arg Ala Ala Gly Gly Arg Glu Val Cys Val Arg  
 165 170 175  
 Asp Val Gly Asp Lys Gly Asp Ala Thr Leu Gly Pro Ser Arg Ser Lys  
 180 185 190  
 Arg Glu Ser Leu Ser Phe Ile Phe Ser Ser Lys Val Ala Leu Ser Gly

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195          200          205
Ala Cys Arg Arg Glu Lys Val Asp Leu Gly Gly Pro Gly Trp Val Gly
  210          215          220
Pro Ala
225

<210> 5241
<211> 461
<212> DNA
<213> Homo sapiens

<400> 5241
gcggcccccg atttgcagcc catggatgca tttatcacgt ttgttctctt gcgtgcctcc
60
ccctcaatat gccgggggtg taccatttcc caagggatga cagcaggggc ccacagcgag
120
ccccaggctg atccggagcc ctcttcatcc ccgtccaggg ccgtttgac tgctcccgcc
180
atcggcacac cttgttctgg ttgtgctggg acggcagcgc cccgtgaggt cagaggggtg
240
ctgtcacatc tgccaccagc tgtggtctcc tggagatttc agtgggtcgg tgcttcgctt
300
ctcacctggc cagctctgag ttcagcctct cgctgtggg gaccctgca tcctggcgcc
360
agaaggagga ggaagaagcc accagaggtt gccaggaacc cagtggcagg ggaggtgggg
420
ctgagccagg cccgccgct gtgccgggag ttccacgcg g
461

<210> 5242
<211> 146
<212> PRT
<213> Homo sapiens

<400> 5242
Met Asp Ala Phe Ile Thr Phe Val Pro Leu Arg Ala Ser Pro Ser Ile
  1          5          10          15
Cys Arg Gly Cys Thr His Phe Gln Gly Met Thr Ala Gly Pro His Ser
  20          25          30
Glu Pro Gln Ala Asp Pro Glu Pro Ser Ser Ser Pro Ser Arg Ala Val
  35          40          45
Cys Thr Ala Pro Gly Ile Gly Thr Pro Cys Ser Gly Cys Ala Gly Thr
  50          55          60
Ala Ala Pro Arg Glu Val Arg Gly Leu Leu Ser His Leu Pro Pro Ser
  65          70          75          80
Val Val Ser Trp Arg Phe Gln Trp Phe Gly Ala Ser Leu Leu Thr Trp
  85          90          95
Pro Ala Leu Ser Ser Ala Ser Arg Leu Trp Gly Pro Leu His Pro Gly
 100          105          110
Gly Arg Arg Arg Lys Lys Pro Pro Glu Val Ala Arg Asn Pro Val
 115          120          125
Ala Gly Glu Val Gly Leu Ser Gln Ala Arg Pro Leu Cys Arg Glu Phe
 130          135          140
Pro Arg

```

145

&lt;210&gt; 5243

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5243

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ngaattcctt gcattctctt ctgggccaaa agaataatga ttaaatttaa gaatcaaacc
60
tggctggacc ttacagacga gccatttggg cagaaggtaa ctgtggaccc tgacaactca
120
aattgcagtg aagaaagtgc taggttgtct ttgaagcttg gtgatgctgg aaacccaga
180
agtcttgcta taagattcat ccttaccat tacaacaagt tgtccatcca gagttgggtt
240
agtttgcgcc gagtcgagat catttccaac aattcaatcc aagcagtctt taacccaact
300
ggcgtatatg ctccctctgg ttactcctac cgctgccaac gcgt
344

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&lt;210&gt; 5244

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5244

```

Xaa Ile Pro Cys Ile Leu Phe Trp Ala Lys Arg Ile Met Ile Lys Phe
 1           5           10          15
Lys Asn Gln Thr Trp Leu Asp Leu Thr Asp Glu Pro Phe Gly Gln Lys
          20          25          30
Val Thr Val Asp Pro Asp Asn Ser Asn Cys Ser Glu Glu Ser Ala Arg
          35          40          45
Leu Ser Leu Lys Leu Gly Asp Ala Gly Asn Pro Arg Ser Leu Ala Ile
          50          55          60
Arg Phe Ile Leu Thr Asn Tyr Asn Lys Leu Ser Ile Gln Ser Trp Phe
65          70          75          80
Ser Leu Arg Arg Val Glu Ile Ile Ser Asn Asn Ser Ile Gln Ala Val
          85          90          95
Phe Asn Pro Thr Gly Val Tyr Ala Pro Ser Gly Tyr Ser Tyr Arg Cys
          100         105         110
Gln Arg

```

&lt;210&gt; 5245

&lt;211&gt; 483

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5245

```

nngccatgga aacgaaagcg gccaaagtaga gtcctgtcct gacgcgccgc ctcccgtagg
60
ctccggcccg ctaagcccg cgccgacaact atgctgaaag ccaagatcct cttcgtgggg
120

```

ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc tgacatcact  
 180  
 gaatacagcc caacccaagg agtgagggtt gagtcctgct ggccggccct gatgaaggat  
 240  
 gctcatggag tggatgatcgt cttcaatgct gacatcccaa gccaccggaa ggaaatggag  
 300  
 atgtggtatt cctgctttgt ccaacagccg tccttacagg acacacagtg tatgctaatt  
 360  
 gcacaccaca aaccaggctc tggagatgat aaaggaagcc tgtctttgtc gccacccttg  
 420  
 aacaagctga agctggtgca ctcaaacctg gaagatgacc ctgaggagat ccggatggaa  
 480  
 ttc  
 483

<210> 5246

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5246

Met	Leu	Lys	Ala	Lys	Ile	Leu	Phe	Val	Gly	Pro	Cys	Glu	Ser	Gly	Lys
1				5					10					15	
Thr	Val	Leu	Ala	Asn	Phe	Leu	Thr	Glu	Ser	Ser	Asp	Ile	Thr	Glu	Tyr
			20					25					30		
Ser	Pro	Thr	Gln	Gly	Val	Arg	Phe	Glu	Ser	Cys	Trp	Pro	Ala	Leu	Met
		35					40					45			
Lys	Asp	Ala	His	Gly	Val	Val	Ile	Val	Phe	Asn	Ala	Asp	Ile	Pro	Ser
	50					55				60					
His	Arg	Lys	Glu	Met	Glu	Met	Trp	Tyr	Ser	Cys	Phe	Val	Gln	Gln	Pro
65					70				75					80	
Ser	Leu	Gln	Asp	Thr	Gln	Cys	Met	Leu	Ile	Ala	His	His	Lys	Pro	Gly
			85					90						95	
Ser	Gly	Asp	Asp	Lys	Gly	Ser	Leu	Ser	Leu	Ser	Pro	Pro	Leu	Asn	Lys
		100						105					110		
Leu	Lys	Leu	Val	His	Ser	Asn	Leu	Glu	Asp	Asp	Pro	Glu	Glu	Ile	Arg
		115					120					125			
Met	Glu	Phe													
		130													

<210> 5247

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 5247

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 ctccggcccg ctaagcccgcg gcggacaact atgctgaaag ccaagatcct ctccgtaggg  
 120  
 ccttgcgaga gtggaaaaac tgttttggcc aactttctga cagaatcttc tgacatcact  
 180  
 gaatacagcc caacccaagg agtgaggatc ctagaatttg agaaccgcga tgttaccage  
 240



aacaacaaag gcacgggctg tgaattcgag ctatgggact gtggtggcga tgctaagttt  
300  
gagtcctgct ggccggccct gatgaaggat gctcatggag tggatgatcgt cttcaatgct  
360  
gacatcccaa gccaccggaa ggaaatggag atgtggtatt cctgctttgt ccaacagccg  
420  
tccttacagg acacacagtg tatgctaatt gcacaccaca aaccaggctc tggagatgat  
480  
aaaggaagcc tgtctttgtc gccacccttg aacaagctga agctggtgca ctcaaacctg  
540  
gaagatgacc ctgaggagat ccggatggaa ttcataaagt atttaaaaag cataatcaac  
600  
tccatgtctg agagcagaga caggaggag atgtcaatta tgacctagcc agccttcacc  
660  
tgggactgcc acatccccag tgaaatcagc atgtttctcg gtgcagatct gaaatcacat  
720  
ccagctcctg atgttttctt ctccctctga ctgcagagga agtggttcta cctgcaggaa  
780  
ggcacctgtc acacagggcg ttcactcaga ccactctgtc tctgccctga gttcagttga  
840  
gaaaatccta ttatcaaatt tggatttctt ggccccagaa cttcccaaag acctgtaaaa  
900  
tggagggtatt taccacctca catatgtcca gttaaacagt ttgtggactt gtaaccgtcg  
960  
cagcccaatg atacaacagt agtttaatca cgtgaaaaaa aaaa  
1004

&lt;210&gt; 5248

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5248

Met Leu Lys Ala Lys Ile Leu Phe Val Gly Pro Cys Glu Ser Gly Lys  
1 5 10 15  
Thr Val Leu Ala Asn Phe Leu Thr Glu Ser Ser Asp Ile Thr Glu Tyr  
20 25 30  
Ser Pro Thr Gln Gly Val Arg Ile Leu Glu Phe Glu Asn Pro His Val  
35 40 45  
Thr Ser Asn Asn Lys Gly Thr Gly Cys Glu Phe Glu Leu Trp Asp Cys  
50 55 60  
Gly Gly Asp Ala Lys Phe Glu Ser Cys Trp Pro Ala Leu Met Lys Asp  
65 70 75 80  
Ala His Gly Val Val Ile Val Phe Asn Ala Asp Ile Pro Ser His Arg  
85 90 95  
Lys Glu Met Glu Met Trp Tyr Ser Cys Phe Val Gln Gln Pro Ser Leu  
100 105 110  
Gln Asp Thr Gln Cys Met Leu Ile Ala His His Lys Pro Gly Ser Gly  
115 120 125  
Asp Asp Lys Gly Ser Leu Ser Leu Ser Pro Pro Leu Asn Lys Leu Lys  
130 135 140  
Leu Val His Ser Asn Leu Glu Asp Asp Pro Glu Glu Ile Arg Met Glu  
145 150 155 160  
Phe Ile Lys Tyr Leu Lys Ser Ile Ile Asn Ser Met Ser Glu Ser Arg

165 170 175  
 Asp Arg Glu Glu Met Ser Ile Met Thr  
 180 185  
 <210> 5249  
 <211> 653  
 <212> DNA  
 <213> Homo sapiens  
 <400> 5249  
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 60  
 taccggggct ggctagtcac gggggagccc agtagagagg agtataaaat ccagtccttt  
 120  
 gatgcagaga cccagcagct gctgaagaca gcactcaaag atccgggtgc tgtggacttg  
 180  
 gagaaagtgg ccaatgtgat tgtggaccat tctctgcagg actgtgtgtt cagcaaggaa  
 240  
 gcaggacgca tgtgtctacgc catcattcag gcagagagta aacaagcagg ccagagtgtc  
 300  
 ttccgcagtg gactcctcaa ccggctgcag caggagtacc aggctcgga gcagctgcga  
 360  
 gcacgctccc tgcagggtcg ggtctgctat gtcaccttta tctgcaacat ctttgactac  
 420  
 ctgagggtga acaacatgcc catgatggcc ctggtgaacc ctgtctatga ctgcctcttc  
 480  
 cggttgcccc agccagacag tttgagcaag gaggaggagg tggactgttt ggtgctgcag  
 540  
 ctgcaccggg ttggggagca gctggagaaa atgaatgggc agcgcatgga tgagctcttt  
 600  
 gtgctgatcc gggatggctt cctgctccca actggcctca gtcctctggc cca  
 653

<210> 5250  
 <211> 217  
 <212> PRT  
 <213> Homo sapiens

<400> 5250  
 Xaa Arg Val Arg Ala Thr Gly Pro Ala Gly Ala Val Leu Ile Pro Ser  
 1 5 10 15  
 Pro Val Lys Ser Tyr Arg Gly Trp Leu Val Met Gly Glu Pro Ser Arg  
 20 25 30  
 Glu Glu Tyr Lys Ile Gln Ser Phe Asp Ala Glu Thr Gln Gln Leu Leu  
 35 40 45  
 Lys Thr Ala Leu Lys Asp Pro Gly Ala Val Asp Leu Glu Lys Val Ala  
 50 55 60  
 Asn Val Ile Val Asp His Ser Leu Gln Asp Cys Val Phe Ser Lys Glu  
 65 70 75 80  
 Ala Gly Arg Met Cys Tyr Ala Ile Ile Gln Ala Glu Ser Lys Gln Ala  
 85 90 95  
 Gly Gln Ser Val Phe Arg Arg Gly Leu Leu Asn Arg Leu Gln Gln Glu  
 100 105 110  
 Tyr Gln Ala Arg Glu Gln Leu Arg Ala Arg Ser Leu Gln Gly Trp Val

115 120 125  
 Cys Tyr Val Thr Phe Ile Cys Asn Ile Phe Asp Tyr Leu Arg Val Asn  
 130 135 140  
 Asn Met Pro Met Met Ala Leu Val Asn Pro Val Tyr Asp Cys Leu Phe  
 145 150 155 160  
 Arg Leu Ala Gln Pro Asp Ser Leu Ser Lys Glu Glu Glu Val Asp Cys  
 165 170 175  
 Leu Val Leu Gln Leu His Arg Val Gly Glu Gln Leu Glu Lys Met Asn  
 180 185 190  
 Gly Gln Arg Met Asp Glu Leu Phe Val Leu Ile Arg Asp Gly Phe Leu  
 195 200 205  
 Leu Pro Thr Gly Leu Ser Ser Leu Ala  
 210 215

<210> 5251  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

<400> 5251  
 atgaacaggc gtgttatatc tgctaaccac tatctagggg gcacctccaa cggctatgcc  
 60  
 caccacagcg ggacggcact tcattatgac gatgtcccg gcaccaacgg ctggggggaa  
 120  
 ccggaagacg gctttcctgc tttctgcagc agaagcttgg gagaagaagg ggcttttgaa  
 180  
 aaccaggcc tgtacgataa ctggccgcct ccgcacatct ttgcccgcta ctctcctgct  
 240  
 gacagaaagg cctctaggct gtctgctgac aagctgtcct ctaaccatta caaataccct  
 300  
 gcctctgctc agtctgtcac taatacctct tctgtgggga gggcgtctct cgggctcaac  
 360  
 tcgcagcctc ag  
 372

<210> 5252  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 5252  
 Met Asn Arg Arg Val Ile Ser Ala Asn Pro Tyr Leu Gly Gly Thr Ser  
 1 5 10 15  
 Asn Gly Tyr Ala His Pro Ser Gly Thr Ala Leu His Tyr Asp Asp Val  
 20 25 30  
 Pro Cys Ile Asn Gly Ser Gly Glu Pro Glu Asp Gly Phe Pro Ala Phe  
 35 40 45  
 Cys Ser Arg Ser Leu Gly Glu Gly Ala Phe Glu Asn Pro Gly Leu  
 50 55 60  
 Tyr Asp Asn Trp Pro Pro His Ile Phe Ala Arg Tyr Ser Pro Ala  
 65 70 75 80  
 Asp Arg Lys Ala Ser Arg Leu Ser Ala Asp Lys Leu Ser Ser Asn His  
 85 90 95  
 Tyr Lys Tyr Pro Ala Ser Ala Gln Ser Val Thr Asn Thr Ser Ser Val

100 105 110  
 Gly Arg Ala Ser Leu Gly Leu Asn Ser Gln Pro Gln  
 115 120

<210> 5253  
 <211> 898  
 <212> DNA  
 <213> Homo sapiens

<400> 5253  
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 ccacagtgc tttccagtcc agcaaatgga aatctgggga gtctatactt tgctcacaac  
 120  
 tcatctcaat gccatccttg tggagagcca cagtgtagtg caagggtcca tccaattcac  
 180  
 tgttgacaag gtcttgagc aacatcacca ggctgccaag gctcagcaga aactacaggc  
 240  
 ctactctca gtggctgtga actccatcat gagtattctg actggaagca ctaggagcag  
 300  
 cttccgaaag atgtgtctcc agacccttca agcagctgac acacaagagt tcaggaccaa  
 360  
 actgcacaaa gtatttcgtg agatcaccca acaccaattt cttcaccact gctcatgtga  
 420  
 ggtgaagcag cagctaaccc tagaaaaaaa ggactcagcc cagggcactg aggacgcacc  
 480  
 tgataacagc agcctggagc tcctagcaga taccagcggg caagcagaaa acaagaggct  
 540  
 caagaggggc agccccgca tagaggagat gcgagctctg cgctctgcca gggccccgag  
 600  
 cccgtcagag gccgccccgc gccgcccga agccaccgcg gccccctca ctctagagg  
 660  
 aagggagcac cgcgaggctc acggcagggc cctggcgccg ggcagggcga gcctcggaag  
 720  
 ccgctggag gacgtgctgt ggctgcagga ggtctccaac ctgtcagagt ggctgagtcc  
 780  
 cagccctggg ccctgagccg ggtccccttc cgcaagcgcc caccgatccg gaggctgcgg  
 840  
 gcagccgtta tcccgtggtt taataaagct gccgcgcgct caaaaaaaaa aaaaaaaaa  
 898

<210> 5254  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 5254  
 Gln Gln Pro Gly Ala Pro Ser Arg Tyr Gln Arg Ala Ser Arg Lys Gln  
 1 5 10 15  
 Glu Ala Gln Glu Gly Gln Pro Pro His Arg Gly Asp Ala Ser Ser Ala  
 20 25 30  
 Leu Cys Gln Gly Pro Glu Pro Val Arg Gly Arg Pro Ala Pro Pro Gly  
 35 40 45  
 Ser His Arg Gly Pro Pro His Ser

50 55

<210> 5255  
<211> 1410  
<212> DNA  
<213> Homo sapiens

<400> 5255  
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caaccccaga tccccatgcc tcgagccctg gatctccaag ctcagctgct ggattctgga  
120  
tgtcaacaaa cctcaccact ggatcctgac aaccacaatg cctggatcct ggggccccca  
180  
tcactggatc ccagatcccc tcactccacc cactggatc ctgcattggt ttttggtttt  
240  
ttgttttttt ttaacctcga cactgggtct cagatccttc tgctgactgc cagatccctg  
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catttcaagc actacgcctt ccacccccag gcaactggatc ccagattccc aagccttcac  
360  
ccaccagatt ctggctccta aaacaagtgc gggggcccca gtggcacagc aagtggatcc  
420  
tggcaactgc agctgctgga ttccagattc tgggtcccca atccctctgc ccagtccctc  
480  
aatgttgaaa cctcatctct tgaaggcaga tctgatatt ccaaggcact gaatcccaag  
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ccctgaatcc cgggtttctg atctgaatct tccaggcgcc ggggtcccaa tggtcaggcc  
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660  
cggttctca tgacatgaaa ttgcatggtc gagggagtct gtggggaagg aagcccaggt  
720  
cctggctgca acctgcacgg atgctggatt cccctcacc ccacctctgc atggccaccc  
780  
cctcccagcc ctgtggggaa actgttcctt ggaaccactc cactccctgc atccccacac  
840  
ttcacagcat cttccatccc cctcccacct tctaggcgaa tagtccccag agctgtgttc  
900  
ctccaagggg tccgaggaat cactcactcc tggaggctgg caaggagaca gtctgaggcc  
960  
agggacacat gaagggatgt cccaccccca gcactatcag ggctcccca ggcttccaga  
1020  
gttgaaagcc aggagaaaat cggcaaagac cacccttccc taaaccaag cacccaatga  
1080  
tgcaaaaaac aaaaacaaaa aaaaccacca aatccccaaa ttcattccag atctatTTTT  
1140  
ctaccagaga gaggagcaaa gtcctectcc cctgcgccct tacattctgc acttcatagt  
1200  
tggattctga gcttaggatc atctggagac cccatggagg gacttggaaa ggggaactgg  
1260  
gatttgggga ggggctggag gacttccgca cgcttccacc tccttcgacc tccactgcgc  
1320  
cccacctccc tgctgtgtg tgttatttca aaggaaaaga acaaaaggaa taaattttct  
1380

aagctcttta aaaaaaaaaa aaaaaaaaaa  
1410

<210> 5256  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 5256  
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1 5 10 15  
Leu His Gly Cys Trp Ile Pro Pro His Pro Thr Ser Ala Trp Pro Pro  
20 25 30  
Pro Pro Ser Pro Val Gly Lys Leu Phe Pro Gly Thr Thr Pro Leu Pro  
35 40 45  
Ala Ser Pro His Phe Thr Ala Ser Ser Ile Pro Leu Pro Pro Ser Arg  
50 55 60  
Arg Ile Val Pro Arg Ala Val Phe Leu Gln Gly Val Arg Gly Ile Thr  
65 70 75 80  
His Ser Trp Arg Leu Ala Arg Arg Gln Ser Glu Ala Arg Asp Thr  
85 90 95

<210> 5257  
<211> 1366  
<212> DNA  
<213> Homo sapiens

<400> 5257  
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accccgcccg gcagtggcgg gggcctgctc ccagcttctg gctgtcacgg acctgccgcc  
120  
tcctctact ccgcatccgc cgagcctgcc cggtccgcg gccttgctta tgggcaccac  
180  
ggggatccag ccaaggtcgt cgaactcaag aacctggagc tagctgctgt gagaggatca  
240  
gatgtccgtg tgaagatgct ggcgggccct atcaatccat ctgacataaa tatgatccaa  
300  
ggaaactacg gactccttcc tgaactgcct gctgttgagg ggaacgaagg tgttgcacag  
360  
gtggtagcgg tgggcagcaa tgtgaccggg ctgaagccag gagactgggt gattccagca  
420  
aatgctgggt tagactcagg aacctggcgg accgaggctg tgttcagcga ggaagcactg  
480  
atccaagttc cgagtgcacat ccctcttcag agcgctgccca ccctgggtgt caatccctgc  
540  
acagcctaca ggatgttgat ggacttcgag caactgcagc caggggattc tgtcatccag  
600  
aatgcatcca acagcggagt ggggcaagca gtcattccaga tcgccgcagc cctgggccta  
660  
agaacctca atgtggtccg agacagacct gatattccaga agctgagtga cagactgaag  
720  
agtctggggg ctgagcatgt catcacagaa gaggagctaa gaaggcccg aatgaaaaac  
780

ttctttaagg acatgccccca gccacggctt gctctcaact gtgttggtgg gaaaagctcc  
 840  
 acagagctgc tgcggcagtt agcgcgtgga ggaaccatgg taacctatgg ggggatggcc  
 900  
 aagcagcccc tcgtagcctc tgtgagcctg ctcattttta aggatctcaa acttcgaggg  
 960  
 ttttggttgt ccagtgga gaaggatcac agtccagacc agttcaagga gctgacctc  
 1020  
 acactgtgcg atctcatccg ccgaggccag ctcacagccc ctgcctgctc ccagggtccc  
 1080  
 ctgcaggact accagtctgc cttggaagcc tccatgaagc cttcatatc ttcaaagcag  
 1140  
 attctcacca tgtgatcatc ccaaaagagc tggagtgaca tgggagggga ggcggatctg  
 1200  
 aggggctggg tgcaggcccc tcagttgggg ctcccacctt cccagacta ctgttctct  
 1260  
 cactgcctct tcctattagg aggatggtga agccagccac gggtttcccc agggccagcc  
 1320  
 ttaaggtatc taataaagtc tgaactctcc cttccaaaaa aaaaaa  
 1366

&lt;210&gt; 5258

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5258

Met	Trp	Val	Cys	Ser	Thr	Leu	Trp	Arg	Val	Arg	Thr	Pro	Pro	Gly	Ser
1				5					10					15	
Gly	Gly	Gly	Leu	Leu	Pro	Ala	Ser	Gly	Cys	His	Gly	Pro	Ala	Ala	Ser
			20					25					30		
Ser	Tyr	Ser	Ala	Ser	Ala	Glu	Pro	Ala	Arg	Val	Arg	Gly	Leu	Val	Tyr
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Gly	His	His	Gly	Asp	Pro	Ala	Lys	Val	Val	Glu	Leu	Lys	Asn	Leu	Glu
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Pro	Ile	Asn	Pro	Ser	Asp	Ile	Asn	Met	Ile	Gln	Gly	Asn	Tyr	Gly	Leu
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		115				120						125			
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Gln	Ser	Ala	Ala	Thr	Leu	Gly	Val	Asn	Pro	Cys	Thr	Ala	Tyr	Arg	Met
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Leu	Met	Asp	Phe	Glu	Gln	Leu	Gln	Pro	Gly	Asp	Ser	Val	Ile	Gln	Asn
		180						185					190		
Ala	Ser	Asn	Ser	Gly	Val	Gly	Gln	Ala	Val	Ile	Gln	Ile	Ala	Ala	Ala
		195					200					205			
Leu	Gly	Leu	Arg	Thr	Ile	Asn	Val	Val	Arg	Asp	Arg	Pro	Asp	Ile	Gln

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Lys Leu Ser Asp Arg	Leu Lys Ser Leu Gly Ala	Glu His Val Ile Thr
225	230	235
Glu Glu Glu Leu Arg	Arg Pro Glu Met Lys Asn Phe Phe	Lys Asp Met
245	250	255
Pro Gln Pro Arg	Leu Ala Leu Asn Cys Val Gly Gly	Lys Ser Ser Thr
260	265	270
Glu Leu Leu Arg	Gln Leu Ala Arg Gly Gly Thr Met Val	Thr Tyr Gly
275	280	285
Gly Met Ala Lys Gln	Pro Val Val Ala Ser Val Ser	Leu Leu Ile Phe
290	295	300
Lys Asp Leu Lys Leu	Arg Gly Phe Trp Leu Ser Gln Trp	Lys Lys Asp
305	310	315
His Ser Pro Asp	Gln Phe Lys Glu Leu Ile Leu Thr	Leu Cys Asp Leu
325	330	335
Ile Arg Arg Gly	Gln Leu Thr Ala Pro Ala Cys Ser	Gln Val Pro Leu
340	345	350
Gln Asp Tyr Gln Ser	Ala Leu Glu Ala Ser Met Lys Pro	Phe Ile Ser
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Ser Lys Gln Ile Leu	Thr Met	
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&lt;210&gt; 5259

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5259

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&lt;210&gt; 5260

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5260

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Gln Ala Val Lys Thr Thr Phe Pro Asn Leu Gly Leu Leu Leu Glu Lys
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Leu Gln Lys Ser Ala Thr Leu Pro Ser Thr Thr Val Gln Pro Ser Pro
35 40 45
Asp Asp Tyr Gly Thr Glu Leu Leu Arg Arg Tyr His Glu Asn Leu Ser



50	55	60
Glu Ile Phe Thr Asp Asn Gln Ile Leu Leu Lys Met Ile Ser His Met		
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&lt;210&gt; 5261

&lt;211&gt; 2394

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5261

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&lt;210&gt; 5262

&lt;211&gt; 275

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5262

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			20					25					30		
Gly	Lys	Gly	Arg	Phe	Leu	Val	Arg	Ile	Cys	Phe	Gln	Gly	Asp	Glu	Gly
		35					40				45				
Ala	Cys	Pro	Thr	Arg	Asp	Phe	Val	Val	Gly	Ala	Leu	Ile	Leu	Arg	Ser
	50					55					60				

Ile Gly Met Asp Pro Ser Asp Ile Tyr Ala Val Ile Gln Ile Pro Gly  
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 85 90 95  
 Phe Leu Arg Val Tyr Glu Glu Lys Arg Glu Gln Glu Asp Cys Trp Glu  
 100 105 110  
 Asn Phe Val Val Leu Gly Arg Ser Lys Ser Ser Leu Lys Thr Leu Phe  
 115 120 125  
 Ile Leu Phe Arg Asn Glu Thr Val Asp Val Glu Asp Ile Val Thr Trp  
 130 135 140  
 Leu Lys Arg His Cys Asp Val Leu Ala Val Pro Val Lys Val Thr Asp  
 145 150 155 160  
 Arg Phe Gly Ile Trp Thr Gly Glu Tyr Lys Cys Glu Ile Glu Leu Arg  
 165 170 175  
 Gln Gly Glu Gly Gly Val Arg His Leu Pro Gly Ala Phe Phe Leu Gly  
 180 185 190  
 Ala Glu Arg Gly Tyr Ser Trp Tyr Lys Gly Gln Pro Lys Thr Cys Phe  
 195 200 205  
 Lys Cys Gly Ser Arg Thr His Met Ser Gly Ser Cys Thr Gln Asp Arg  
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 Cys Phe Arg Cys Gly Glu Glu Gly His Leu Ser Pro Tyr Cys Arg Lys  
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<400> 5264

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 Trp His Phe Asn Ile Asn Gln Lys Arg Phe Ser Lys Ala Gln Pro Thr  
 35 40 45  
 Cys Phe Leu Leu Ile Leu Pro Cys Gln Lys Ile Met Cys Ile Tyr  
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 Phe Gln Leu Leu Leu Met Glu Thr Thr Ala Met Leu Asp Leu Leu Val  
 65 70 75 80  
 Ile Arg Gln Leu Lys Ser Ala Leu Ser Gln Thr Leu Leu Cys His Leu  
 85 90 95  
 Leu Ile Leu Val Leu Ile Cys Ser Arg  
 100 105

&lt;210&gt; 5265

&lt;211&gt; 3203

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5265

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<210> 5266

<211> 853

<212> PRT

<213> Homo sapiens

<400> 5266

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		20						25				30		
Glu	Glu	Ile	Leu	Pro	Glu	Pro	Gly	Ser	Glu	Thr	Pro	Thr	Val	Ala
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Glu	Glu	Thr	Thr	Thr	Thr	Ile	Ile	Thr	Thr	Thr	Thr	Val	Thr	Thr
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Val	Leu	Ala	Gly	Gly	Ser	Pro	Gly	Leu	Ala	Pro	Arg	Leu	Leu	Ala
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Arg	Leu	Leu	Leu	His	Phe	Gln	Ser	Pro	Arg	Val	Pro	Arg	Gly	Gly

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 275 280 285  
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 His Phe Glu Arg Val Ser Leu Asp Glu Asp Asn Asp Arg Leu Met Val  
 325 330 335  
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 Val Glu Leu Leu Ser Glu Thr Pro Ala Asn Pro Leu Leu Leu Ser Leu  
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 His Gly Asn Val Thr Thr Thr Asp Pro Glu Tyr Arg Pro Gly Ala Leu  
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 580 585 590  
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 595 600 605  
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 Ala Pro Pro Ala Cys Gln Lys Ile Met Thr Cys Ala Asp Pro Gly Glu

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 Ser His Val Gln Tyr Arg Cys Leu Pro Gly Tyr Ser Leu Glu Gly Ala  
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                                  675                      680                      685  
 Asp Arg Val Pro Lys Cys Ala Leu Lys Tyr Glu Pro Cys Leu Asn Pro  
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 Gly Val Pro Glu Asn Gly Tyr Gln Thr Leu Tyr Lys His His Tyr Gln  
 705                      710                      715                      720  
 Ala Gly Glu Ser Leu Arg Phe Phe Cys Tyr Glu Gly Phe Glu Leu Ile  
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 Gly Glu Val Thr Ile Thr Cys Val Pro Gly His Pro Ser Gln Trp Thr  
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 Ser Gln Pro Pro Leu Cys Lys Val Ala Tyr Glu Glu Leu Leu Asp Asn  
                                  755                      760                      765  
 Arg Lys Leu Glu Val Thr Gln Thr Thr Asp Pro Ser Arg Gln Leu Glu  
                                  770                      775                      780  
 Gly Gly Asn Leu Ala Leu Ala Ile Leu Leu Pro Leu Gly Leu Val Ile  
 785                      790                      795                      800  
 Val Leu Gly Ser Gly Val Tyr Ile Tyr Tyr Thr Lys Leu Gln Gly Lys  
                                  805                      810                      815  
 Ser Leu Phe Gly Phe Ser Gly Ser His Ser Tyr Ser Pro Ile Thr Val  
                                  820                      825                      830  
 Glu Ser Asp Phe Ser Asn Pro Leu Tyr Glu Ala Gly Asp Thr Arg Glu  
                                  835                      840                      845  
 Tyr Glu Val Ser Ile  
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&lt;210&gt; 5267

&lt;211&gt; 885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5267

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 885

<210> 5268

<211> 279

<212> PRT

<213> Homo sapiens

<400> 5268

Phe	Gly	Thr	Arg	Gly	Thr	Met	Leu	Gln	Gly	Glu	Tyr	Thr	Tyr	Ser	Leu
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Gly	Gln	Val	Tyr	Asp	Pro	Thr	Thr	Thr	Tyr	Leu	Gly	Ala	Pro	Val	Phe
		20						25					30		
Tyr	Ala	Pro	Gln	Thr	Tyr	Ala	Ala	Ile	Pro	Ser	Leu	His	Phe	Pro	Ala
		35					40					45			
Thr	Lys	Gly	His	Leu	Ser	Asn	Arg	Ala	Ile	Ile	Arg	Ala	Pro	Ser	Val
	50					55					60				
Arg	Glu	Ile	Tyr	Met	Asn	Val	Pro	Val	Gly	Ala	Ala	Gly	Val	Arg	Gly
65					70					75				80	
Leu	Gly	Gly	Arg	Gly	Tyr	Leu	Ala	Tyr	Thr	Gly	Leu	Gly	Arg	Gly	Tyr
			85						90				95		
Gln	Val	Lys	Gly	Asp	Lys	Arg	Glu	Asp	Lys	Leu	Tyr	Asp	Ile	Leu	Pro
			100					105					110		
Gly	Met	Glu	Leu	Thr	Pro	Met	Asn	Pro	Val	Thr	Leu	Lys	Pro	Gln	Gly
		115					120					125			
Ile	Lys	Leu	Ala	Pro	Gln	Ile	Leu	Glu	Glu	Ile	Cys	Gln	Lys	Asn	Asn
	130					135					140				
Trp	Gly	Gln	Pro	Val	Tyr	Gln	Leu	His	Ser	Ala	Ile	Gly	Gln	Asp	Gln
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Arg	Gln	Leu	Phe	Leu	Tyr	Lys	Ile	Thr	Ile	Pro	Ala	Leu	Ala	Ser	Gln
			165					170						175	
Asn	Pro	Ala	Ile	His	Pro	Phe	Thr	Pro	Pro	Lys	Leu	Ser	Ala	Phe	Val
		180						185					190		
Asp	Glu	Ala	Lys	Thr	Tyr	Ala	Ala	Glu	Tyr	Thr	Leu	Gln	Thr	Leu	Gly
		195					200					205			
Ile	Pro	Thr	Asp	Gly	Gly	Asp	Gly	Thr	Met	Ala	Thr	Ala	Ala	Ala	Ala
	210					215					220				
Ala	Thr	Ala	Phe	Pro	Gly	Tyr	Ala	Val	Pro	Asn	Ala	Thr	Ala	Pro	Val
225					230					235				240	
Ser	Ala	Ala	Gln	Leu	Lys	Gln	Ala	Val	Thr	Leu	Gly	Gln	Asp	Leu	Ala
			245					250					255		
Ala	Tyr	Thr	Thr	Tyr	Glu	Val	Tyr	Pro	Thr	Phe	Ala	Val	Thr	Ala	Arg
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Gly	Asp	Gly	Tyr	Gly	Thr	Phe									

275

&lt;210&gt; 5269

&lt;211&gt; 1177

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5269

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240  
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1080  
aaattcttaa aaacgcttta gatttttatg tatgttaaaa tgcagtattg taaagtgaat  
1140  
atatatatga ataaatgaat atatttttaa aaaaaaa  
1177

&lt;210&gt; 5270

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5270

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Met Asn Glu Gln Ser Gln Lys Thr Gln Asn Ile Ser Ser Phe Asp Ser
 1           5           10           15
Glu Leu Phe Leu Glu Glu Leu Asp Glu Leu Pro Pro Leu Ser Pro Met
          20           25           30
Gln Pro Ile Ser Glu Glu Glu Ala Ile Gln Ile Ile Ala Asp Pro Pro
          35           40           45
Leu Pro Pro Ala Ser Phe Thr Leu Arg Asp Tyr Val Asp His Ser Glu
          50           55           60
Thr Leu Gln Lys Leu Val Leu Leu Gly Val Asp Leu Ser Lys Ile Glu
65           70           75           80
Lys His Pro Glu Ala Ala Asn Leu Leu Leu Arg Leu Asp Phe Glu Lys
          85           90           95
Asp Ile Lys Gln Met Leu Leu Phe Leu Lys Asp Val Gly Ile Glu Asp
          100          105          110
Asn Gln Leu Gly Ala Phe Leu Thr Lys Asn His Ala Ile Phe Ser Glu
          115          120          125
Asp Leu Glu Asn Leu Lys Thr Arg Val Ala Tyr Leu His Ser Lys Asn
          130          135          140
Phe Ser Lys Ala Asp Val Ala Gln Met Val Arg Lys Ala Pro Phe Leu
          145          150          155          160
Leu Asn Phe Ser Val Glu Arg Leu Asp Asn Arg Leu Gly Phe Phe Gln
          165          170          175
Lys Glu Leu Glu Leu Ser Val Lys Lys Thr Arg Asp Leu Val Val Arg
          180          185          190
Leu Pro Arg Leu Leu Thr Gly Ser Leu Glu Pro Val Lys Glu Asn Met
          195          200          205
Lys Val Tyr Arg Leu Glu Leu Gly Phe Lys His Asn Glu Ile Gln His
          210          215          220
Met Ile Thr Arg Ile Pro Lys Met Leu Thr Ala Asn Lys Met Lys Leu
          225          230          235          240
Thr Glu Thr Phe Asp Phe Val His Asn Val Met Ser Ile Pro His His
          245          250          255
Ile Ile Val Lys Phe Pro Gln Val Phe Asn Thr Arg Leu Phe Lys Val
          260          265          270
Lys Glu Arg His Leu Phe Leu Thr Tyr Leu Gly Arg Ala Gln Tyr Asp
          275          280          285
Pro Ala Lys Pro Asn Tyr Ile Ser Leu Asp Lys Leu Val Ser Ile Pro
          290          295          300
Asp Glu Ile Phe Cys Glu Glu Ile Ala Lys Ala Ser Val Gln Asp Phe
          305          310          315          320
Glu Lys Phe Leu Lys Thr Leu
          325

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&lt;210&gt; 5271

&lt;211&gt; 1185

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5271

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120

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 1185

&lt;210&gt; 5272

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5272

Met	Ala	Ala	Leu	Thr	Thr	Leu	Phe	Lys	Tyr	Ile	Asp	Glu	Asn	Gln	Asp
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Arg	Tyr	Ile	Lys	Pro	Val	Gln	Leu	Gln	Gln	Pro	Gln	Arg	Val	Ser	Leu
			20					25					30		
Glu	Cys	Gly	Asn	Val	Thr	Gly	Ala	Ser	Ser	Pro	Ser	Arg	Thr	Pro	Phe
		35					40					45			
Gln	Asn	Pro	Ser	Leu	Leu	Leu	Val	His	Lys	Gln	Lys	Leu	Ala	Lys	Trp
		50				55					60				
Val	Ala	Ile	Gln	Ser	Val	Ser	Ala	Trp	Pro	Glu	Lys	Arg	Gly	Glu	Ile
65					70					75				80	
Arg	Arg	Met	Met	Glu	Val	Ala	Ala	Ala	Asp	Val	Lys	Gln	Leu	Gly	Gly

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 Ser Val Glu Leu Val Asp Ile Gly Lys Gln Lys Leu Pro Asp Gly Ser  
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 115 120 125  
 Gln Lys Lys Thr Val Cys Ile Tyr Gly His Leu Asp Val Gln Pro Ala  
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 Ala Leu Glu Asp Gly Trp Asp Ser Glu Pro Phe Thr Leu Val Glu Arg  
 145 150 155 160  
 Asp Gly Lys Leu Tyr Gly Arg Gly Ser Thr Asp Asp Lys Gly Pro Val  
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 Ala Gly Trp Ile Asn Ala Leu Glu Ala Tyr Gln Lys Thr Gly Gln Glu  
 180 185 190  
 Ile Pro Val Asn Val Arg Phe Cys Leu Glu Gly Met Glu Glu Ser Gly  
 195 200 205  
 Ser Glu Gly Leu Asp Glu Leu Ile Phe Ala Arg Lys Asp Thr Phe Phe  
 210 215 220  
 Lys Asp Val Asp Tyr Val Cys Ile Ser Asp Asn Tyr Trp Leu Gly Lys  
 225 230 235 240  
 Lys Lys Pro Cys Ile Thr Tyr Gly Leu Arg Gly Ile Cys Tyr Phe Phe  
 245 250 255  
 Ile Glu Val Glu Cys Ser Asn Lys Asp Leu His Ser Gly Val Tyr Gly  
 260 265 270  
 Gly Ser Val His Glu Ala Met Thr Asp Leu Ile Leu Leu Met Gly Ser  
 275 280 285  
 Leu Val Asp Lys Arg Gly Asn Ile Leu Ile Pro Gly Ile Asn Glu Ala  
 290 295 300  
 Val Ala Ala Val Thr Glu Glu Glu His Lys Leu Tyr Asp Asp Ile Asp  
 305 310 315 320  
 Phe Asp Ile Glu Glu Phe Ala Lys Asp Val Gly Ala Gln Ile Leu Leu  
 325 330 335  
 His Ser His Lys Lys Asp Ile Leu Met His Arg Trp Arg Tyr Pro Ser  
 340 345 350  
 Leu Ser Leu His Gly Ile Glu Gly Ala Phe Ser Gly Ser Gly Ala Lys  
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 Pro  
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&lt;210&gt; 5273

&lt;211&gt; 4580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5273

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 4580

&lt;210&gt; 5274

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5274

Met Ser Gly Ser Phe Glu Leu Ser Val Gln Asp Leu Asn Asp Leu Leu  
 1 5 10 15  
 Ser Asp Gly Ser Gly Cys Tyr Ser Leu Pro Ser Gln Pro Cys Asn Glu  
 20 25 30  
 Val Thr Pro Arg Ile Tyr Val Gly Asn Ala Ser Val Ala Gln Asp Ile  
 35 40 45  
 Pro Lys Leu Gln Lys Leu Gly Ile Thr His Val Leu Asn Ala Ala Glu  
 50 55 60  
 Gly Arg Ser Phe Met His Val Asn Thr Asn Ala Asn Phe Tyr Lys Asp



65		70		75		80									
Ser	Gly	Ile	Thr	Tyr	Leu	Gly	Ile	Lys	Ala	Asn	Asp	Thr	Gln	Glu	Phe
				85					90					95	
Asn	Leu	Ser	Ala	Tyr	Phe	Glu	Arg	Ala	Ala	Asp	Phe	Ile	Asp	Gln	Ala
			100					105					110		
Leu	Ala	Gln	Lys	Asn	Gly	Arg	Val	Leu	Val	His	Cys	Arg	Glu	Gly	Tyr
		115				120						125			
Ser	Arg	Ser	Pro	Thr	Leu	Val	Ile	Ala	Tyr	Leu	Met	Met	Arg	Gln	Lys
		130				135					140				
Met	Asp	Val	Lys	Ser	Ala	Leu	Ser	Ile	Val	Arg	Gln	Asn	Arg	Glu	Ile
145					150					155				160	
Gly	Pro	Asn	Asp	Gly	Phe	Leu	Ala	Gln	Leu	Cys	Gln	Leu	Asn	Asp	Arg
			165					170					175		
Leu	Ala	Lys	Glu	Gly	Lys	Leu	Lys	Pro							
		180						185							

&lt;210&gt; 5275

&lt;211&gt; 810

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5275

```

nntctcgctc aggcctcggtt ttaccccgga gtctattcga agggggctgc tacgtcagcg
60
cgtctcagcg taagacggcg ctattccgct gtaacagctt ccggcgggtc ctggatgttg
120
atgtcctgca tctaacgcgg tgtgaccccc gaagccgagc gagctccgga ggaatttcag
180
tatctgctac ggtaacttca tcagcccgcc aagatggcga tgcaagcggc caagagggcg
240
aacattcgac ttccacctga agtaaactcg atattgtata taagaaattt gccatacaaa
300
atcacagctg aagaaatgta tgatatattt gggaaatatg gacctattcg tcaaatcaga
360
gtggggaaca cacctgaaac tagaggaaca gcttatgtgg tctatgagga catctttgat
420
gccaagaatg catgtgatca cctatcgggg ttcaatgttt gtaacagata ccttgtgggt
480
ttgtactata atgccaacag ggcatttcag aagatggaca caaagaagaa ggaggaacag
540
ttgaagcttc tcaaggagaa atatggcatc aacacagatc caccaaaata aatgttttct
600
acattttcat ttggactaaa tcccacgaat gacaactacc accttttttt cctttttaat
660
taatactaaa tattgtgatt tcttatttga ggttcaaaat gacctgcttg aaactttgat
720
acatattgga atacattatg ttaataaact tgtagctttt tgtgaaacaa aaaaaaaag
780
tcgacgcggc cggcaattta gtagtagtag
810

```

&lt;210&gt; 5276

&lt;211&gt; 125

&lt;212&gt; PRT

<213> Homo sapiens

<400> 5276

```

Met Ala Met Gln Ala Ala Lys Arg Ala Asn Ile Arg Leu Pro Pro Glu
 1           5           10           15
Val Asn Arg Ile Leu Tyr Ile Arg Asn Leu Pro Tyr Lys Ile Thr Ala
      20           25           30
Glu Glu Met Tyr Asp Ile Phe Gly Lys Tyr Gly Pro Ile Arg Gln Ile
      35           40           45
Arg Val Gly Asn Thr Pro Glu Thr Arg Gly Thr Ala Tyr Val Val Tyr
      50           55           60
Glu Asp Ile Phe Asp Ala Lys Asn Ala Cys Asp His Leu Ser Gly Phe
      65           70           75           80
Asn Val Cys Asn Arg Tyr Leu Val Val Leu Tyr Tyr Asn Ala Asn Arg
      85           90           95
Ala Phe Gln Lys Met Asp Thr Lys Lys Lys Glu Glu Gln Leu Lys Leu
      100          105          110
Leu Lys Glu Lys Tyr Gly Ile Asn Thr Asp Pro Pro Lys
      115          120          125

```

<210> 5277

<211> 612

<212> DNA

<213> Homo sapiens

<400> 5277

```

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gtggcggcca tcacggccac ggagctgctc atcgtggtga agtacgaccc ccacacgctc
120
acctgtccc tgcccttcta catctcccag tgctggaccc tcggctcgt cctggcgctc
180
acctggaccg tctggcgctt cttcctgcgg gacatcacat tgaggtacaa ggagaccgg
240
tggcagaagt ggcagaacaa ggatgaccag ggcagcaccg tcggcaacgg ggaccagcac
300
ccactggggc tggacgaaga cctgctgggg cctgggggtgg ccgagggcga gggagcacca
360
actccaaact gacctgggce gtggtgcct cgtgagcctc ccagagccca ggcctccgtg
420
gcctcctcct gtgtgagtcc caccaggagc cacgtgcccg gccttgccct caaggttttt
480
tgcttttctc ctgtgcacct ggcgaggctg aaggcgaggg gtggaggagg cccagcaca
540
gcctcatctc catgtgtaca cgtgtgtacg tgtgtatgcg tgtgtgtacg tgtgtatgcg
600
tgtgtgtacg tg
612

```

<210> 5278

<211> 123

<212> PRT

<213> Homo sapiens

&lt;400&gt; 5278

```

Ile Tyr Asp Phe Met Asp Asp Pro Lys Pro His Lys Lys Leu Gly Pro
1      5      10      15
Gln Ala Trp Leu Val Ala Ala Ile Thr Ala Thr Glu Leu Leu Ile Val
20      25      30
Val Lys Tyr Asp Pro His Thr Leu Thr Leu Ser Leu Pro Phe Tyr Ile
35      40      45
Ser Gln Cys Trp Thr Leu Gly Ser Val Leu Ala Leu Thr Trp Thr Val
50      55      60
Trp Arg Phe Phe Leu Arg Asp Ile Thr Leu Arg Tyr Lys Glu Thr Arg
65      70      75      80
Trp Gln Lys Trp Gln Asn Lys Asp Asp Gln Gly Ser Thr Val Gly Asn
85      90      95
Gly Asp Gln His Pro Leu Gly Leu Asp Glu Asp Leu Leu Gly Pro Gly
100      105      110
Val Ala Glu Gly Glu Gly Ala Pro Thr Pro Asn
115      120

```

&lt;210&gt; 5279

&lt;211&gt; 1225

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5279

```

atcaatggag cagaggagaa aattctagaa gatttccgaa aaaccacag ccctgatgcc
60
cctgactttc agctgcaggc catgattcag gcagcaggaa agcttggtt gattgataaa
120
ctactcccta agctgattgc aggtggccac aaagtactca tcttctccca gatggtgcgc
180
tgccctgaca tctagaaga ttatttaate cagagaagat acacctatga acgtattgat
240
ggcgagtagc ggggaaacct ggcgcaggct gccatcgacc gcttcagcaa gcctgactca
300
gaccgctttg tcttcttact gtgcaccaga gcgggaggcc tggggatcaa tctcacagct
360
gctgatacct gcacatatt tgattctgac tggaaccac aaaatgactt gcaggctcag
420
gcccgatgtc accgcatagg ccagagcaaa gctgtgaagg tgtatcgctt catcactcga
480
aattcctacg agcgcgagat gtttgacaag gccagcctaa agctggggct ggacaaggct
540
gttcttcaga catcaaccga aaggcgaggc ccaatgggta cagcactctc aaaaatggag
600
gtggaggacc tactccgaa aggtgcttat ggagccttaa tggatgaaga agatgaaggc
660
tccaagtctt gtgaagaaga catagaccag attctgcaga ggcaacgca caccatcacc
720
atccagtctg aggggaaagg gtccactttt gccaggcta gctttgtggc ttcaggaaac
780
agaacagata tttccttaga tgatcctaac ttttggcaga aatgggctaa aatagctgaa
840
ctagacactg aagcaaagaa tgaaaaggaa agcttagtga tcgaccgacc tcgctgaga
900

```

aagcagacca aacactacaa ctcgtttgag gaagacgagc tcatggagtt ttcagagtta  
 960  
 gacagcgact cagacgaaag gcccacgaga tccaggcgcc tcaatgacaa agccaggcgc  
 1020  
 tacctccgag cggagtgctt cggggtagag aagaacctgc tcatctttgg ctggggccgg  
 1080  
 tggaaggaca tcctgactca tggccgattc aagtggcatc tgaacgagaa ggacatggag  
 1140  
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 1200  
 aagagtttca tttgggaact gatca  
 1225

<210> 5280

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5280

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Ser	Pro	Asp	Ala	Pro	Asp	Phe	Gln	Leu	Gln	Ala	Met	Ile	Gln	Ala	Ala
			20					25					30		
Gly	Lys	Leu	Val	Leu	Ile	Asp	Lys	Leu	Leu	Pro	Lys	Leu	Ile	Ala	Gly
		35					40					45			
Gly	His	Lys	Val	Leu	Ile	Phe	Ser	Gln	Met	Val	Arg	Cys	Leu	Asp	Ile
	50					55				60					
Leu	Glu	Asp	Tyr	Leu	Ile	Gln	Arg	Arg	Tyr	Thr	Tyr	Glu	Arg	Ile	Asp
65					70				75					80	
Gly	Arg	Val	Arg	Gly	Asn	Leu	Arg	Gln	Ala	Ile	Asp	Arg	Phe	Ser	
				85				90					95		
Lys	Pro	Asp	Ser	Asp	Arg	Phe	Val	Phe	Leu	Leu	Cys	Thr	Arg	Ala	Gly
			100					105					110		
Gly	Leu	Gly	Ile	Asn	Leu	Thr	Ala	Ala	Asp	Thr	Cys	Ile	Ile	Phe	Asp
		115					120					125			
Ser	Asp	Trp	Asn	Pro	Gln	Asn	Asp	Leu	Gln	Ala	Gln	Ala	Arg	Cys	His
	130					135					140				
Arg	Ile	Gly	Gln	Ser	Lys	Ala	Val	Lys	Val	Tyr	Arg	Leu	Ile	Thr	Arg
145					150					155				160	
Asn	Ser	Tyr	Glu	Arg	Glu	Met	Phe	Asp	Lys	Ala	Ser	Leu	Lys	Leu	Gly
			165					170					175		
Leu	Asp	Lys	Ala	Val	Leu	Gln	Thr	Ser	Thr	Glu	Arg	Ala	Ala	Pro	Met
		180					185						190		
Gly	Thr	Ala	Leu	Ser	Lys	Met	Glu	Val	Glu	Asp	Leu	Leu	Arg	Lys	Gly
	195						200					205			
Ala	Tyr	Gly	Ala	Leu	Met	Asp	Glu	Glu	Asp	Glu	Gly	Ser	Lys	Phe	Cys
	210					215				220					
Glu	Glu	Asp	Ile	Asp	Gln	Ile	Leu	Gln	Arg	Arg	Thr	His	Thr	Ile	Thr
225					230					235				240	
Ile	Gln	Ser	Glu	Gly	Lys	Gly	Ser	Thr	Phe	Ala	Lys	Ala	Ser	Phe	Val
			245						250				255		
Ala	Ser	Gly	Asn	Arg	Thr	Asp	Ile	Ser	Leu	Asp	Asp	Pro	Asn	Phe	Trp
		260					265					270			
Gln	Lys	Trp	Ala	Lys	Ile	Ala	Glu	Leu	Asp	Thr	Glu	Ala	Lys	Asn	Glu

```

      275              280              285
Lys Glu Ser Leu Val Ile Asp Arg Pro Arg Val Arg Lys Gln Thr Lys
  290              295              300
His Tyr Asn Ser Phe Glu Glu Asp Glu Leu Met Glu Phe Ser Glu Leu
  305              310              315              320
Asp Ser Asp Ser Asp Glu Arg Pro Thr Arg Ser Arg Arg Leu Asn Asp
      325              330              335
Lys Ala Arg Arg Tyr Leu Arg Ala Glu Cys Phe Arg Val Glu Lys Asn
      340              345              350
Leu Leu Ile Phe Gly Trp Gly Arg Trp Lys Asp Ile Leu Thr His Gly
      355              360              365
Arg Phe Lys Trp His Leu Asn Glu Lys Asp Met Glu Met Ile Cys Arg
      370              375              380
Ala Leu Leu Val Tyr Cys Val Lys His Tyr Lys Gly Asp Glu Lys Ile
  385              390              395              400
Lys Ser Phe Ile Trp Glu Leu Ile
      405

```

<210> 5281  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

```

<400> 5281
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120
aggcattcct ggtactcaca ggtctgacag ccacagttgg agacacagct atttcttcag
180
aagagaaaac acaacgcatg tcattaatga gacatcacat gggacaatca ttgtccaaag
240
aagttgcaca tgtcctcacc aaacctggag cagatcacga ttgggaaaac ctagagaaag
300
acttgagatt gctcattaat ggggattatg aagaag
336

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<210> 5282  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

```

<400> 5282
Met Gln Thr Ala Gln Asn Lys Tyr Gln Glu Leu Lys Asn Ile Cys Ser
  1              5              10              15
Tyr Arg Ala Gln Ala Phe Leu Val Leu Thr Gly Leu Thr Ala Thr Val
      20              25              30
Gly Asp Thr Ala Ile Ser Ser Glu Glu Lys Thr Gln Arg Met Ser Leu
      35              40              45
Met Arg His His Met Gly Gln Ser Leu Ser Lys Glu Val Ala His Val
      50              55              60
Leu Thr Lys Pro Gly Ala Asp His Asp Trp Glu Asn Leu Glu Lys Asp
  65              70              75              80
Leu Arg Leu Leu Ile Asn Gly Asp Tyr Glu Glu

```

85

90

&lt;210&gt; 5283

&lt;211&gt; 1989

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5283

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60  
ggcaagtgtgta acctacattc ccagcccacc agcctgacgc ccagccaggg agagagtacc  
120  
atggatggca tcattgaaca gaagagcatg ctggtgcaca gtaaaatcag tgatgctggc  
180  
aagaggaatg gtttaattaa caccagaaac ttgatggccg agagcagaga tggctctggtg  
240  
tctgtttacc cagcgcccca gtaccagagc caccgggtgg gggccagcac agtgccggcc  
300  
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360  
cagtcagtgg agtcccgtc ccggcccaac atcatcctct attcagaggg cgtgctgcgc  
420  
tcctgggggg acggtgtggc cgccgactgc tgcgagacca cttcatcga ggaccggtcg  
480  
cccaccaaag acagcctcga gtaccgggat ggggaagttca ttgacctctc agctgatgac  
540  
ataaaaaatcc acaccctgtc ctacgatgtg gaggaggagg aggagttcca ggagctggag  
600  
agcgactact caagcgacac agagagtggag gacaatttcc tcatgatgcc cccgcgggac  
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1380

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 1800  
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 1860  
 cttcatgctg ctttaagttac cagatgaatg ctgagaaata agtaatcaca gacattttaa  
 1920  
 taccatttca ttgctgtttt acgagtgttc attacttaac aaaaaattat cttttagctt  
 1980  
 ttctgctta  
 1989

&lt;210&gt; 5284

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5284

Met	Asp	Gly	Ile	Ile	Glu	Gln	Lys	Ser	Met	Leu	Val	His	Ser	Lys	Ile
1			5						10					15	
Ser	Asp	Ala	Gly	Lys	Arg	Asn	Gly	Leu	Ile	Asn	Thr	Arg	Asn	Leu	Met
		20						25					30		
Ala	Glu	Ser	Arg	Asp	Gly	Leu	Val	Ser	Val	Tyr	Pro	Ala	Pro	Gln	Tyr
		35					40					45			
Gln	Ser	His	Arg	Val	Gly	Ala	Ser	Thr	Val	Pro	Ala	Ser	Leu	Asp	Ser
		50				55				60					
Ser	Arg	Ser	Glu	Pro	Met	Gln	Gln	Leu	Leu	Asp	Pro	Asn	Thr	Leu	Gln
65					70					75				80	
Gln	Ser	Val	Glu	Ser	Arg	Tyr	Arg	Pro	Asn	Ile	Ile	Leu	Tyr	Ser	Glu
			85						90					95	
Gly	Val	Leu	Arg	Ser	Trp	Gly	Asp	Gly	Val	Ala	Ala	Asp	Cys	Cys	Glu
			100					105					110		
Thr	Thr	Phe	Ile	Glu	Asp	Arg	Ser	Pro	Thr	Lys	Asp	Ser	Leu	Glu	Tyr
		115					120					125			
Pro	Asp	Gly	Lys	Phe	Ile	Asp	Leu	Ser	Ala	Asp	Asp	Ile	Lys	Ile	His
		130				135					140				
Thr	Leu	Ser	Tyr	Asp	Val	Glu	Glu	Glu	Glu	Glu	Phe	Gln	Glu	Leu	Glu
145					150					155				160	
Ser	Asp	Tyr	Ser	Ser	Asp	Thr	Glu	Ser	Glu	Asp	Asn	Phe	Leu	Met	Met
				165					170					175	
Pro	Pro	Arg	Asp	His	Leu	Gly	Leu	Ser	Val	Phe	Ser	Met	Leu	Cys	Cys
				180				185					190		
Phe	Trp	Pro	Leu	Gly	Ile	Ala	Ala	Phe	Tyr	Leu	Ser	His	Glu	Thr	Asn

	195		200		205										
Lys	Ala	Val	Ala	Lys	Gly	Asp	Leu	His	Gln	Ala	Ser	Thr	Ser	Ser	Arg
	210				215						220				
Arg	Ala	Leu	Phe	Leu	Ala	Val	Leu	Ser	Ile	Thr	Ile	Gly	Thr	Gly	Val
225				230					235					240	
Tyr	Val	Gly	Val	Ala	Val	Ala	Leu	Ile	Ala	Tyr	Leu	Ser	Lys	Asn	Asn
			245					250					255		
His	Leu														

&lt;210&gt; 5285

&lt;211&gt; 2155

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5285

```

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120
ccctatgtgc cgttacggca gcgccggcag ctactgctcc agaagctgct gcagcgaaga
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1080
gagggtgaca tccgtaccat cttctcctac ttcaagggcc agcgacagac cctgctcttc
1140

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 1260  
 gtgaaggagg aggccaagat ggtgtacctg ctcgagtgcc tgcagaagac acccccgcct  
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 2040  
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 2155

&lt;210&gt; 5286

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5286

Xaa Arg Val Gln Gln Arg Met Glu Glu Ser Glu Pro Glu Arg Lys Arg  
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 Ala Arg Thr Asp Glu Val Pro Ala Gly Gly Ser Arg Ser Glu Ala Glu  
 20 25 30  
 Asp Glu Asp Asp Glu Asp Tyr Val Pro Tyr Val Pro Leu Arg Gln Arg  
 35 40 45  
 Arg Gln Leu Leu Leu Gln Lys Leu Leu Gln Arg Arg Arg Lys Gly Ala  
 50 55 60  
 Ala Glu Glu Glu Gln Gln Asp Ser Gly Ser Glu Pro Arg Gly Asp Glu  
 65 70 75 80  
 Asp Asp Ile Pro Leu Gly Pro Gln Ser Asn Val Ser Leu Leu Asp Gln  
 85 90 95  
 His Gln His Leu Lys Glu Lys Ala Glu Ala Arg Lys Glu Ser Ala Lys

				100					105					110			
Glu	Lys	Gln	Leu	Lys	Glu	Glu	Glu	Lys	Ile	Leu	Glu	Ser	Val	Ala	Glu		
			115				120					125					
Gly	Arg	Ala	Leu	Met	Ser	Val	Lys	Glu	Met	Ala	Lys	Gly	Ile	Thr	Tyr		
			130				135					140					
Asp	Asp	Pro	Ile	Lys	Thr	Ser	Trp	Thr	Pro	Pro	Arg	Tyr	Val	Leu	Ser		
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				165					170					175			
Val	Glu	Gly	Asp	Gly	Ile	Pro	Pro	Pro	Ile	Lys	Ser	Phe	Lys	Glu	Met		
			180						185					190			
Lys	Phe	Pro	Ala	Ala	Ile	Leu	Arg	Gly	Leu	Lys	Lys	Lys	Gly	Ile	His		
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His	Pro	Thr	Pro	Ile	Gln	Ile	Gln	Gly	Ile	Pro	Thr	Ile	Leu	Ser	Gly		
			210				215					220					
Arg	Asp	Met	Ile	Gly	Ile	Ala	Phe	Thr	Gly	Ser	Gly	Lys	Thr	Leu	Val		
225					230						235				240		
Phe	Thr	Leu	Pro	Val	Ile	Met	Phe	Cys	Leu	Glu	Gln	Glu	Lys	Arg	Leu		
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Pro	Phe	Ser	Lys	Arg	Glu	Gly	Pro	Tyr	Gly	Leu	Ile	Ile	Cys	Pro	Ser		
			260					265					270				
Arg	Glu	Leu	Ala	Arg	Gln	Thr	His	Gly	Ile	Leu	Glu	Tyr	Tyr	Cys	Arg		
			275				280					285					
Leu	Leu	Gln	Glu	Asp	Ser	Ser	Pro	Leu	Leu	Arg	Cys	Ala	Leu	Cys	Ile		
			290				295				300						
Gly	Gly	Met	Ser	Val	Lys	Glu	Gln	Met	Glu	Thr	Ile	Arg	His	Gly	Val		
305					310					315					320		
His	Met	Met	Val	Ala	Thr	Pro	Gly	Arg	Leu	Met	Asp	Leu	Leu	Gln	Lys		
				325					330					335			
Lys	Met	Val	Ser	Leu	Asp	Ile	Cys	Arg	Tyr	Leu	Ala	Leu	Asp	Glu	Ala		
			340					345					350				
Asp	Arg	Met	Ile	Asp	Met	Gly	Phe	Glu	Gly	Asp	Ile	Arg	Thr	Ile	Phe		
			355				360					365					
Ser	Tyr	Phe	Lys	Gly	Gln	Arg	Gln	Thr	Leu	Leu	Phe	Ser	Ala	Thr	Met		
			370			375					380						
Pro	Lys	Lys	Ile	Gln	Asn	Phe	Ala	Lys	Ser	Ala	Leu	Val	Lys	Pro	Val		
385					390					395					400		
Thr	Ile	Asn	Val	Gly	Arg	Ala	Gly	Ala	Ala	Ser	Leu	Asp	Val	Ile	Gln		
				405					410					415			
Glu	Val	Glu	Tyr	Val	Lys	Glu	Glu	Ala	Lys	Met	Val	Tyr	Leu	Leu	Glu		
			420					425				430					
Cys																	

530                      535                      540  
 Ala Cys Asp Glu Ser Val Leu Met Asp Leu Lys Ala Leu Leu Leu Glu  
 545                      550                      555                      560  
 Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp  
                     565                      570                      575  
 Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly  
                     580                      585                      590  
 Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln  
                     595                      600                      605  
 Thr Lys Gln Val Ser Asn Ile Gly Arg Lys Asp Tyr Leu Ala His Ser  
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 Ser Met Asp Phe  
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<210> 5287  
 <211> 581  
 <212> DNA  
 <213> Homo sapiens

<400> 5287  
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<210> 5288  
 <211> 193  
 <212> PRT  
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                     20                      25                      30  
 Arg Ala Arg Cys Gly Cys Val Gly Ser Gly Ala Glu Leu Gln Asn Pro  
                     35                      40                      45  
 Arg Thr His Phe Val Leu Ser Pro His Cys Phe Met Gly Gly Ile Met

50                      55                      60  
 Ala Pro Lys Asp Ile Met Thr Asn Thr His Ala Lys Ser Ile Leu Asn  
 65                      70                      75                      80  
 Ser Met Asn Ser Leu Arg Lys Ser Asn Thr Leu Cys Asp Val Thr Leu  
                     85                      90                      95  
 Arg Val Glu Gln Lys Asp Phe Pro Ala His Arg Ile Val Leu Ala Ala  
                     100                      105                      110  
 Cys Ser Asp Tyr Phe Cys Ala Met Phe Thr Ser Glu Leu Ser Glu Lys  
                     115                      120                      125  
 Gly Lys Pro Tyr Val Asp Ile Gln Gly Leu Thr Ala Ser Thr Met Glu  
                     130                      135                      140  
 Ile Leu Leu Asp Phe Val Tyr Thr Glu Thr Val His Val Thr Val Glu  
 145                      150                      155                      160  
 Asn Val Gln Glu Leu Leu Pro Ala Ala Cys Leu Leu Gln Leu Lys Gly  
                     165                      170                      175  
 Val Lys Gln Ala Cys Cys Glu Phe Leu Glu Ser Gln Leu Asp Pro Ser  
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<210> 5289  
 <211> 361  
 <212> DNA  
 <213> Homo sapiens

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 361

<210> 5290  
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 <212> PRT  
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<400> 5290  
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                     20                      25                      30  
 Lys Lys Leu Ile Leu Ile Gly Ala Thr Leu Lys Lys Lys Leu Glu His  
                     35                      40                      45  
 Gly Leu Thr Arg Ile Trp Gln Asp Val Gln Leu Lys Val Lys Thr Tyr

50		55		60											
Leu	Leu	Gly	Thr	Asp	Leu	Ser	Ile	Phe	Lys	Tyr	Asp	Asp	Phe	Ile	Phe
65					70					75					80
Val	Leu	Asp	Ile	Ile	Ser	Arg	Leu	Met	Gln	Val	Gly	Glu	Glu	Phe	
			85						90					95	

<210> 5291  
 <211> 767  
 <212> DNA  
 <213> Homo sapiens

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 240  
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<210> 5292  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 5292  
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 Thr Pro Val Leu Pro Pro Thr Leu Pro Ala Thr Cys Arg Leu Pro Pro  
 35 40 45  
 Met Val Ala Ser Val Ala Gly Gly Leu Gln Ala Gly Leu Asp Gly Glu  
 50 55 60  
 Ser Arg Gly Trp Ser Gly Gly Arg Gly Gln Pro His Pro Gly Gly Ala

65					70					75				80
Arg	Gly	Gln	Arg	His	Thr	Val	Ala	Ala	Pro	Ala	Xaa	Arg	Ala	Arg
				85					90				95	
Gly	Ala	Glu	Pro	His	Ala	Ala	Ala	Ala	Pro	Arg	Arg	Leu	Pro	His
			100					105				110		
Pro	Pro	Pro	Arg	Ala	Gly	His	Pro	Ala	Pro	Gln	Leu	Ala	Gly	Trp
		115				120					125			
Gln	Ala	Pro	Arg	Leu	Lys	Arg	Thr	Val	Pro	Val	Arg	Arg	Ser	
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&lt;210&gt; 5293

&lt;211&gt; 1428

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5293

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1140

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<210> 5294

<211> 290

<212> PRT

<213> Homo sapiens

<400> 5294

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 Arg Val Tyr Asn Gly Arg Leu Lys Val Gln Arg Leu Cys Ser Glu Met  
 35 40 45  
 Glu Glu Leu Ala Glu His Gly Ile Phe Leu Pro Pro Asn Met Gln Gly  
 50 55 60  
 Leu Thr Asp Asp Gln Ile Glu Glu Leu Lys Leu Lys Asp Glu Trp Gly  
 65 70 75 80  
 Glu Lys Cys Val Pro Ser Gly Gly Ala Val Phe Lys Lys Asp Asp Ile  
 85 90 95  
 Gly Arg Arg Asn Gly Gln Ala Pro Asn Glu Lys Met Lys Gln Val Leu  
 100 105 110  
 Lys Lys Thr Ile Glu Glu Ala Lys Ala Ile Ile Ser Lys Lys Gln Val  
 115 120 125  
 Glu Ala Gly Val Cys Val Thr Met Glu Met Val Lys Asp Ala Leu Asp  
 130 135 140  
 Gln Leu Arg Gly Ala Val Met Ile Val Tyr Pro Met Gly Leu Pro Pro  
 145 150 155 160  
 Tyr Asp Pro Ile Arg Met Glu Phe Glu Asn Lys Glu Asp Leu Ser Gly  
 165 170 175  
 Thr Gln Ala Gly Leu Asn Val Ile Lys Glu Ala Glu Ala Gln Leu Trp  
 180 185 190  
 Trp Ala Ala Lys Glu Leu Arg Arg Thr Lys Lys Leu Ser Asp Tyr Val  
 195 200 205  
 Gly Lys Asn Glu Lys Thr Lys Ile Ile Ala Lys Ile Gln Gln Arg Gly  
 210 215 220  
 Gln Gly Ala Pro Ala Arg Glu Pro Ile Ile Ser Ser Glu Glu Gln Lys  
 225 230 235 240  
 Gln Leu Met Leu Tyr Tyr His Arg Arg Gln Glu Glu Leu Lys Arg Leu  
 245 250 255  
 Glu Glu Asn Asp Asp Ala Tyr Leu Asn Ser Pro Trp Ala Asp Asn  
 260 265 270  
 Thr Ala Leu Lys Arg His Phe His Gly Val Lys Asp Ile Lys Trp Arg  
 275 280 285  
 Pro Arg

290

&lt;210&gt; 5295

&lt;211&gt; 1451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5295

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180  
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1440

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1451

<210> 5296

<211> 133

<212> PRT

<213> Homo sapiens

<400> 5296

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		20						25					30		
Leu	Asp	Thr	Lys	Arg	Asn	Gln	Asn	Arg	Glu	Gly	Leu	Arg	Ala	Leu	Gln
	35					40					45				
Lys	Asp	Leu	Ser	Leu	Ser	Glu	Asp	Val	Met	Val	Cys	Phe	Gly	Asn	Met
	50					55				60					
Phe	Ile	Lys	Met	Pro	His	Pro	Glu	Thr	Lys	Glu	Met	Ile	Glu	Lys	Asp
65					70					75				80	
Gln	Asp	His	Leu	Asp	Lys	Glu	Ile	Glu	Lys	Leu	Arg	Lys	Gln	Leu	Lys
		85						90					95		
Val	Lys	Val	Asn	Arg	Leu	Phe	Glu	Ala	Gln	Gly	Lys	Pro	Glu	Leu	Lys
		100						105					110		
Gly	Phe	Asn	Leu	Asn	Pro	Leu	Asn	Gln	Asp	Glu	Leu	Lys	Ala	Leu	Lys
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Val	Ile	Leu	Lys	Gly											
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<210> 5297

<211> 5318

<212> DNA

<213> Homo sapiens

<400> 5297

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 6540  
 ggaaatttat tatttcttgc aattcccgtg atagctctgt tctttatgca ttgtctcaac  
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa  
 6712

&lt;210&gt; 5302

&lt;211&gt; 1339

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5302

Ala	Pro	Pro	Ala	Gly	Arg	Arg	Arg	Met	Gln	Ala	Ala	Pro	Arg	Ala	Gly
1				5				10						15	
Cys	Gly	Ala	Ala	Leu	Leu	Leu	Trp	Ile	Val	Ser	Ser	Cys	Leu	Cys	Arg
			20					25					30		
Ala	Trp	Thr	Ala	Pro	Ser	Thr	Ser	Gln	Lys	Cys	Asp	Glu	Pro	Leu	Val
		35					40					45			
Ser	Gly	Leu	Pro	His	Val	Ala	Phe	Ser	Ser	Ser	Ser	Ser	Ile	Ser	Gly

50					55					60					
Ser 65	Tyr	Ser	Pro	Gly	Tyr 70	Ala	Lys	Ile	Asn	Lys 75	Arg	Gly	Gly	Ala	Gly 80
Gly	Trp	Ser	Pro	Ser 85	Asp	Ser	Asp	His 90	Tyr	Gln	Trp	Leu	Gln	Val 95	Asp
Phe	Gly	Asn	Arg	Lys 100	Gln	Ile	Ser	Ala 105	Ile	Ala	Thr	Gln	Gly	Arg 110	Tyr
Ser	Ser	Ser	Asp	Trp 115	Val	Thr	Gln	Tyr 120	Arg	Met	Leu	Tyr	Ser	Asp 125	Thr
Gly	Arg	Asn	Trp	Lys 130	Pro	Tyr	His	Gln 135	Asp	Gly	Asn	Ile	Trp	Ala 140	Phe
Pro 145	Gly	Asn	Ile	Asn 150	Ser	Asp	Gly	Val 155	Val	Arg	His	Glu	Leu	Gln 160	His
Pro	Ile	Ile	Ala	Arg 165	Tyr	Val	Arg	Ile 170	Val	Pro	Leu	Asp	Trp	Asn 175	Gly
Glu	Gly	Arg	Ile 180	Gly	Leu	Arg	Ile 185	Glu	Val	Tyr	Gly	Cys	Ser	Tyr 190	Trp
Ala	Asp	Val	Ile 195	Asn	Phe	Asp	Gly 200	His	Val	Val	Leu	Pro	Tyr	Arg 205	Phe
Arg	Asn	Lys	Lys 210	Met	Lys	Thr	Leu 215	Lys	Asp	Val	Ile	Ala	Leu	Asn 220	Phe
Lys 225	Thr	Ser	Glu	Ser 230	Glu	Gly	Val	Ile 235	Leu	His	Gly	Glu	Gly	Gln 240	Gln
Gly	Asp	Tyr	Ile 245	Thr	Leu	Glu	Leu 250	Lys	Lys	Ala	Lys	Leu	Val	Leu 255	Ser
Leu	Asn	Leu	Gly 260	Ser	Asn	Gln	Leu 265	Gly	Pro	Ile	Tyr	Gly	His	Thr 270	Ser
Val	Met	Thr	Gly 275	Ser	Leu	Leu	Asp 280	Asp	His	His	Trp	His	Ser	Val 285	Val
Ile	Glu	Arg	Gln 290	Gly	Arg	Ser	Ile 295	Asn	Leu	Thr	Leu	Asp	Arg	Ser 300	Met
Gln 305	His	Phe	Arg	Thr 310	Asn	Gly	Glu	Phe 315	Asp	Tyr	Leu	Asp	Leu	Asp 320	Tyr
Glu	Ile	Thr	Phe 325	Gly	Gly	Ile	Pro	Phe 330	Ser	Gly	Lys	Pro	Ser	Ser 335	Ser
Ser	Arg	Lys	Asn 340	Phe	Lys	Gly	Cys 345	Met	Glu	Ser	Ile	Asn	Tyr	Asn 350	Gly
Val	Asn	Ile	Thr 355	Asp	Leu	Ala	Arg 360	Arg	Lys	Lys	Leu	Glu	Pro	Ser 365	Asn
Val	Gly	Asn	Leu 370	Ser	Phe	Ser	Cys 375	Val	Glu	Pro	Tyr	Thr	Val	Pro 380	Val
Phe 385	Phe	Asn	Ala	Thr 390	Ser	Tyr	Leu	Glu	Val	Pro	Gly	Arg	Leu	Asn 400	Gln
Asp	Leu	Phe	Ser 405	Val	Ser	Phe	Gln	Phe 410	Arg	Thr	Trp	Asn	Pro	Asn 415	Gly
Leu	Leu	Val	Phe 420	Ser	His	Phe	Ala	Asp 425	Asn	Leu	Gly	Asn	Val	Glu 430	Ile
Asp	Leu	Thr	Glu 435	Ser	Lys	Val	Gly	Val 440	His	Ile	Asn	Ile	Thr	Gln 445	Thr
Lys	Met	Ser	Gln 450	Ile	Asp	Ile	Ser	Ser 455	Gly	Ser	Gly	Leu	Asn	Asp 460	Gly
Gln 465	Trp	His	Glu	Val 470	Arg	Phe	Leu	Ala	Lys	Glu	Asn	Phe	Ala	Ile 480	Leu
Thr	Ile	Asp	Gly	Asp	Glu	Ala	Ser	Ala	Val	Arg	Thr	Asn	Ser	Pro	Leu

485 490 495  
 Gln Val Lys Thr Gly Glu Lys Tyr Phe Phe Gly Gly Phe Leu Asn Gln  
 500 505 510  
 Met Asn Asn Ser Ser His Ser Val Leu Gln Pro Ser Phe Gln Gly Cys  
 515 520 525  
 Met Gln Leu Ile Gln Val Asp Asp Gln Leu Val Asn Leu Tyr Glu Val  
 530 535 540  
 Ala Gln Arg Lys Pro Gly Ser Phe Ala Asn Val Ser Ile Asp Met Cys  
 545 550 555 560  
 Ala Ile Ile Asp Arg Cys Val Pro Asn His Cys Glu His Gly Gly Lys  
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 Cys Ser Gln Thr Trp Asp Ser Phe Lys Cys Thr Cys Asp Glu Thr Gly  
 580 585 590  
 Tyr Ser Gly Ala Thr Cys His Asn Ser Ile Tyr Glu Pro Ser Cys Glu  
 595 600 605  
 Ala Tyr Lys His Leu Gly Gln Thr Ser Asn Tyr Tyr Trp Ile Asp Pro  
 610 615 620  
 Asp Gly Ser Gly Pro Leu Gly Pro Leu Lys Val Tyr Cys Asn Met Thr  
 625 630 635 640  
 Glu Asp Lys Val Trp Thr Ile Val Ser His Asp Leu Gln Met Gln Thr  
 645 650 655  
 Pro Val Val Gly Tyr Asn Pro Glu Lys Tyr Ser Val Thr Gln Leu Val  
 660 665 670  
 Tyr Ser Ala Ser Met Asp Gln Ile Ser Ala Ile Thr Asp Ser Ala Glu  
 675 680 685  
 Tyr Cys Glu Gln Tyr Val Ser Tyr Phe Cys Lys Met Ser Arg Leu Leu  
 690 695 700  
 Asn Thr Pro Asp Gly Ser Pro Tyr Thr Trp Trp Val Gly Lys Ala Asn  
 705 710 715 720  
 Glu Lys His Tyr Tyr Trp Gly Gly Ser Gly Pro Gly Ile Gln Lys Cys  
 725 730 735  
 Ala Cys Gly Ile Glu Arg Asn Cys Thr Asp Pro Lys Tyr Tyr Cys Asn  
 740 745 750  
 Cys Asp Ala Asp Tyr Lys Gln Trp Arg Lys Asp Ala Gly Phe Leu Ser  
 755 760 765  
 Tyr Lys Asp His Leu Pro Val Ser Gln Val Val Val Gly Asp Thr Asp  
 770 775 780  
 Arg Gln Gly Ser Glu Ala Lys Leu Ser Val Gly Pro Leu Arg Cys Gln  
 785 790 795 800  
 Gly Asp Arg Asn Tyr Trp Asn Ala Ala Ser Phe Pro Asn Pro Ser Ser  
 805 810 815  
 Tyr Leu His Phe Ser Thr Phe Gln Gly Glu Thr Ser Ala Asp Ile Ser  
 820 825 830  
 Phe Tyr Phe Lys Thr Leu Thr Pro Trp Gly Val Phe Leu Glu Asn Met  
 835 840 845  
 Gly Lys Glu Asp Phe Ile Lys Leu Glu Leu Lys Ser Ala Thr Glu Val  
 850 855 860  
 Ser Phe Ser Phe Asp Val Gly Asn Gly Pro Val Glu Ile Val Val Arg  
 865 870 875 880  
 Ser Pro Thr Pro Leu Asn Asp Asp Gln Trp His Arg Val Thr Ala Glu  
 885 890 895  
 Arg Asn Val Lys Gln Ala Ser Leu Gln Val Asp Arg Leu Pro Gln Gln  
 900 905 910  
 Ile Arg Lys Ala Pro Thr Glu Gly His Thr Arg Leu Glu Leu Tyr Ser

915	920	925
Gln Leu Phe Val Gly Gly Ala Gly Gly Gln Gln Gly Phe Leu Gly Cys		
930	935	940
Ile Arg Ser Leu Arg Met Asn Gly Val Thr Leu Asp Leu Glu Glu Arg		
945	950	955
Ala Lys Val Thr Ser Gly Phe Ile Ser Gly Cys Ser Gly His Cys Thr		
965	970	975
Ser Tyr Gly Thr Asn Cys Glu Asn Gly Gly Lys Cys Leu Glu Arg Tyr		
980	985	990
His Gly Tyr Ser Cys Asp Cys Ser Asn Thr Ala Tyr Asp Gly Thr Phe		
995	1000	1005
Cys Asn Lys Asp Val Gly Ala Phe Phe Glu Glu Gly Met Trp Leu Arg		
1010	1015	1020
Tyr Asn Phe Gln Ala Pro Ala Thr Asn Ala Arg Asp Ser Ser Ser Arg		
1025	1030	1035
Val Asp Asn Ala Pro Asp Gln Gln Asn Ser His Pro Asp Leu Ala Gln		
1045	1050	1055
Glu Glu Ile Arg Phe Ser Phe Ser Thr Thr Lys Ala Pro Cys Ile Leu		
1060	1065	1070
Leu Tyr Ile Ser Ser Phe Thr Thr Asp Phe Leu Ala Val Leu Val Lys		
1075	1080	1085
Pro Thr Gly Ser Leu Gln Ile Arg Tyr Asn Leu Gly Gly Thr Arg Glu		
1090	1095	1100
Pro Tyr Asn Ile Asp Val Asp His Arg Asn Met Ala Asn Gly Gln Pro		
1105	1110	1115
His Ser Val Asn Ile Thr Arg His Glu Lys Thr Ile Phe Leu Lys Leu		
1125	1130	1135
Asp His Tyr Pro Ser Val Ser Tyr His Leu Pro Ser Ser Ser Asp Thr		
1140	1145	1150
Leu Phe Asn Ser Pro Lys Ser Leu Phe Leu Gly Lys Val Ile Glu Thr		
1155	1160	1165
Gly Lys Ile Asp Gln Glu Ile His Lys Tyr Asn Thr Pro Gly Phe Thr		
1170	1175	1180
Gly Cys Leu Ser Arg Val Gln Phe Asn Gln Ile Ala Pro Leu Lys Ala		
1185	1190	1195
Ala Leu Arg Gln Thr Asn Ala Ser Ala His Val His Ile Gln Gly Glu		
1205	1210	1215
Leu Val Glu Ser Asn Cys Gly Ala Ser Pro Leu Thr Leu Ser Pro Met		
1220	1225	1230
Ser Ser Ala Thr Asp Pro Trp His Leu Asp His Leu Asp Ser Ala Ser		
1235	1240	1245
Ala Asp Phe Pro Tyr Asn Pro Gly Gln Gly Gln Ala Ile Arg Asn Gly		
1250	1255	1260
Val Asn Arg Asn Ser Ala Ile Ile Gly Gly Val Ile Ala Val Val Ile		
1265	1270	1275
Phe Thr Ile Leu Cys Thr Leu Val Phe Leu Ile Arg Tyr Met Phe Arg		
1285	1290	1295
His Lys Gly Thr Tyr His Thr Asn Glu Ala Lys Gly Ala Glu Ser Ala		
1300	1305	1310
Glu Ser Ala Asp Ala Ala Ile Met Asn Asn Asp Pro Asn Phe Thr Glu		
1315	1320	1325
Thr Ile Asp Glu Ser Lys Lys Glu Trp Leu Ile		
1330	1335	

<210> 5303  
 <211> 334  
 <212> DNA  
 <213> Homo sapiens

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 120  
 atggctgcat gaaggagtca cagcggcgag gctactgctc acgccacctg tccatgcgaa  
 180  
 ccaaagagat ggaaggcctg gcagacagtg ggcctggcgg ggcggggccgg cccgcggccg  
 240  
 tggcagcccg tgagggcagc acggagtttg actggggtga tgagacgtcg agggacagtg  
 300  
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 334

<210> 5304  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

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 Arg Gly Ala Arg Leu Gly Ser Arg Asp Gly Cys Met Lys Glu Ser Gln  
 20 25 30  
 Arg Arg Gly Tyr Cys Ser Arg His Leu Ser Met Arg Thr Lys Glu Met  
 35 40 45  
 Glu Gly Leu Ala Asp Ser Gly Pro Gly Gly Ala Gly Arg Pro Ala Ala  
 50 55 60  
 Val Ala Ala Arg Glu Gly Ser Thr Glu Phe Asp Trp Gly Asp Glu Thr  
 65 70 75 80  
 Ser Arg Asp Ser Gly Gly Gln Gln Cys Gly Asp Ser Trp Arg Leu  
 85 90 95

<210> 5305  
 <211> 582  
 <212> DNA  
 <213> Homo sapiens

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 120  
 ctgttgtagg cactggctag ggaggggag gcctccttcc tgcccctcga gacactcttg  
 180  
 ggagatgcat tttccgtctg gctcacaggg ggagggtag gctttgtacc ccagcccctg  
 240  
 cccaggccac tgtgaggggtg ggtgctggct gagcccctgg ggcagaagga gtggggcagg  
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 420  
 caggggtgtc tgaagccgcc ctgtcagctg gccgttccaa gcctgtggct ggagctggtg  
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<210> 5306

<211> 62

<212> PRT

<213> Homo sapiens

<400> 5306

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Gln	Leu	Ala	Gly	Pro	Ser	Leu	Trp	Leu	Glu	Leu	Val	Cys	Val	Tyr	Leu
			20					25				30			
Ile	Lys	Ser	His	Arg	Cys	Leu	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
		35				40					45				
Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
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<210> 5307

<211> 1551

<212> DNA

<213> Homo sapiens

<400> 5307

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 120  
 cattctgtct cccagccttt cttctctctt tgtgtgtctc cagcacttcc ttcttttcta  
 180  
 acatggcctg gagagagtct ctctctcctt gtctctgtct cttaataata gtttttaacg  
 240  
 tggacatctc ttccttggtg cagtgggttt taaatactga gaagaaccaa gtcaggtttt  
 300  
 ttaaagcaga ctaaaagcat gaaattgctt tcagaagaat gtatatcatc gggaaaagt  
 360  
 cgggggcaga gtgggggaat caggctttat tcaaaagaaa cagttgaaaa catgggactt  
 420  
 tttctacca atgcccattt cagcactcct ctgagactaa ttgggaaacg gggaaattct  
 480  
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 540  
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 600  
 tgtggggaat ccacgtgggt gacgttagaa cctcccttct gcagactgtt gcctgtcatc  
 660



taagcgaatt ggaaatgctg agcttccata agtcagctga gttttaaagg taaacgttat  
 720  
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 900  
 gtgggtgaaa atggatgcaa gtgattctaa gtttgtggat ttgtggatag cagagggatc  
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 1020  
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 1551

&lt;210&gt; 5308

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5308

Met	Leu	Gly	Val	Gly	Ser	Glu	Glu	Leu	Thr	Gln	Gly	Arg	Asp	Gly	Ser
1				5					10					15	
Leu	Leu	Ile	Asp	Leu	Thr	Trp	Thr	His	Arg	Gly	Gly	Lys	Thr	Cys	Gly
			20					25					30		
Asp	His	His	Arg	Gly	His	Gly	Pro	Thr	Ser	Val	Ile	Trp	Glu	Thr	Gly
		35					40					45			
Leu	Gly	Arg	Gly	Gly	Asp	Phe	Pro	Lys	Ser	Pro	Ser	Ile	His	Asp	Arg
	50					55					60				
Gly	Arg	Ala	Trp	Glu	Leu	Gly	Thr	Gln	Gly	Ser	Ser	Lys	Arg	Ser	Arg
65				70					75					80	
Ser	Leu	Cys	Tyr	Pro	Gln	Ile	His	Lys	Leu	Arg	Ile	Thr	Cys	Ile	His
				85				90					95		
Phe	Pro	Pro	Pro	Trp	Thr	Leu	Cys	Phe	Glu	Leu	Phe	Cys	Leu	Pro	Asp
				100				105					110		

&lt;210&gt; 5309

&lt;211&gt; 2078

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5309

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120  
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180  
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360  
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420  
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480  
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720  
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780  
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840  
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900  
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960  
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1020  
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1260  
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1380  
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1440  
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gaaggataga ctcataatta aaatgtctaa catgtctctg ttgagaaatt tattaatgt  
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 1680  
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 1740  
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 1860  
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 1920  
 ttgtaacaca cttcatggtg ttcccatagg ctttgctgtc tagtcttata gtttgagggt  
 1980  
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 2078

<210> 5310

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5310

Met	Met	Ala	Gly	Cys	Gly	Glu	Ile	Asp	His	Ser	Ile	Asn	Met	Leu	Pro
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Thr	Asn	Arg	Lys	Ala	Asn	Glu	Ser	Cys	Ser	Asn	Thr	Ala	Pro	Ser	Leu
			20					25					30		
Thr	Val	Pro	Glu	Cys	Ala	Ile	Cys	Leu	Gln	Thr	Cys	Val	His	Pro	Val
		35					40					45			
Ser	Leu	Pro	Cys	Lys	His	Val	Phe	Cys	Tyr	Leu	Cys	Val	Lys	Gly	Ala
	50					55				60					
Ser	Trp	Leu	Gly	Lys	Arg	Cys	Ala	Leu	Cys	Arg	Gln	Glu	Ile	Pro	Glu
65					70					75				80	
Asp	Phe	Leu	Asp	Lys	Pro	Thr	Leu	Leu	Ser	Pro	Glu	Glu	Leu	Lys	Ala
				85					90					95	
Ala	Ser	Arg	Gly	Asn	Gly	Glu	Tyr	Ala	Trp	Tyr	Tyr	Glu	Gly	Arg	Asn
			100					105					110		
Gly	Trp	Trp	Gln	Tyr	Asp	Glu	Arg	Thr	Ser	Arg	Glu	Leu	Glu	Asp	Ala
		115					120					125			
Phe	Ser	Lys	Gly	Lys	Lys	Asn	Thr	Glu	Met	Leu	Ile	Ala	Gly	Phe	Leu
		130				135					140				
Tyr	Val	Ala	Asp	Leu	Glu	Asn	Met	Val	Gln	Tyr	Arg	Arg	Asn	Glu	His
145					150					155				160	
Gly	Arg	Arg	Arg	Lys	Ile	Lys	Arg	Asp	Ile	Ile	Asp	Ile	Pro	Lys	Lys
				165				170						175	
Gly	Val	Ala	Gly	Leu	Arg	Leu	Asp	Cys	Asp	Ala	Asn	Thr	Val	Asn	Leu
			180					185					190		
Ala	Arg	Glu	Ser	Ser	Ala	Asp	Gly	Ala	Asp	Ser	Val	Ser	Ala	Gln	Ser
		195					200						205		
Gly	Ala	Ser	Val	Gln	Pro	Leu	Val	Ser	Ser	Val	Arg	Pro	Leu	Thr	Ser

210	215	220
Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser Pro Asp Ala Ser		
225	230	235
Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu Ser Gly Asp Asn		240
	245	250
Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu Asp His Glu Ser		255
	260	265
Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser Ile Glu Glu Thr		270
	275	280
Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser Ala Val Val Ala		285
	290	295
Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser Asn Ala Asn Gln		300
305	310	315
Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp Arg Ser Val Ala		320
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 <212> DNA  
 <213> Homo sapiens

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<210> 5312  
 <211> 190  
 <212> PRT  
 <213> Homo sapiens

<400> 5312  
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      20           25           30
Ile Lys Ser Ser Asp Thr Arg Cys Cys Glu Leu Cys Lys Tyr Glu Phe
      35           40           45
Ile Met Glu Thr Lys Leu Lys Pro Leu Arg Lys Trp Glu Lys Leu Gln
      50           55           60
Met Thr Ser Ser Glu Arg Arg Lys Ile Met Cys Ser Val Thr Phe His
      65           70           75           80
Val Ile Ala Ile Thr Cys Val Val Trp Ser Leu Tyr Val Leu Ile Asp
      85           90           95
Arg Pro Ala Glu Glu Ile Lys Gln Gly Gln Ala Thr Gly Ile Leu Glu
      100          105          110
Trp Pro Phe Trp Thr Lys Leu Val Val Val Ala Ile Gly Phe Thr Arg
      115          120          125
Gly Leu Leu Phe Met Tyr Val Gln Cys Lys Val Tyr Val Gln Leu Trp
      130          135          140
Lys Arg Leu Lys Ala Tyr Asn Arg Val Ile Tyr Val Gln Asn Cys Pro
      145          150          155          160
Glu Thr Ser Lys Lys Asn Ile Phe Glu Lys Ser Pro Leu Thr Glu Pro
      165          170          175
Asn Phe Glu Asn Lys His Gly Tyr Gly Ile Cys His Ser Asp
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&lt;210&gt; 5313

&lt;211&gt; 322

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5313

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322

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&lt;210&gt; 5314

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5314

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Thr Arg Val Leu Lys Gly Val Met Arg Val Gly Ile Leu Ala Lys Gly
      20           25           30
Leu Leu Leu Arg Gly Asp Arg Asn Val Arg Leu Ala Leu Leu Cys Ser

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Arg	Gln	His	Arg	Gln	Phe	His	Val	Val	Cys	Asp	Trp	Pro	Val	His	Met
65					70					75					80
Glu	Val	Phe	Ser	Asp	Leu	Ala	Leu	Asp	Thr	Pro	Ala	Asn	Arg	Thr	His
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<210> 5315

<211> 2298

<212> DNA

<213> Homo sapiens

<400> 5315

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420					
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&lt;210&gt; 5316

&lt;211&gt; 544

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5316

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			20					25					30		
Glu	Phe	Thr	Asp	Leu	Gly	His	Arg	Leu	Asp	Cys	Leu	Asp	Leu	Lys	Gly
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Glu	Lys	Leu	Asp	Tyr	Lys	Thr	Cys	Glu	Ala	Leu	Glu	Glu	Val	Phe	Lys

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Arg	Leu	Gln	Phe	Lys	Val	Val	Asp	Leu	Glu	Gln	Thr	Asn	Leu	Asp	Glu		
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Asp	Gly	Ala	Ser	Ala	Leu	Phe	Asp	Met	Ile	Glu	Tyr	Tyr	Glu	Ser	Ala		
				85					90					95			
Thr	His	Leu	Asn	Ile	Ser	Phe	Asn	Lys	His	Ile	Gly	Thr	Arg	Gly	Trp		
			100					105					110				
Gln	Ala	Ala	Ala	His	Met	Met	Arg	Lys	Thr	Ser	Cys	Leu	Gln	Tyr	Leu		
			115				120					125					
Asp	Ala	Arg	Asn	Thr	Pro	Leu	Leu	Asp	His	Ser	Ala	Pro	Phe	Val	Ala		
			130			135					140						
Arg	Ala	Leu	Arg	Ile	Arg	Ser	Ser	Leu	Ala	Val	Leu	His	Leu	Glu	Asn		
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Ala	Ser	Leu	Ser	Gly	Arg	Pro	Leu	Met	Leu	Leu	Ala	Thr	Ala	Leu	Lys		
				165				170					175				
Met	Asn	Met	Asn	Leu	Arg	Glu	Leu	Tyr	Leu	Ala	Asp	Asn	Lys	Leu	Asn		
			180					185				190					
Gly	Leu	Gln	Asp	Ser	Ala	Gln	Leu	Gly	Asn	Leu	Leu	Lys	Phe	Asn	Cys		
			195				200					205					
Ser	Leu	Gln	Ile	Leu	Asp	Leu	Arg	Asn	Asn	His	Val	Leu	Asp	Ser	Gly		
			210			215					220						
Leu	Ala	Tyr	Ile	Cys	Glu	Gly	Leu	Lys	Glu	Gln	Arg	Lys	Gly	Leu	Val		
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Thr	Leu	Val	Leu	Trp	Asn	Asn	Gln	Leu	Thr	His	Thr	Gly	Met	Ala	Phe		
				245				250					255				
Leu	Gly	Met	Thr	Leu	Ser	His	Thr	Gln	Ser	Leu	Glu	Thr	Leu	Asn	Leu		
			260					265				270					
Gly	His	Asn	Pro	Ile	Gly	Asn	Glu	Gly	Val	Arg	His	Leu	Lys	Asn	Gly		
			275				280					285					
Leu	Ile	Ser	Asn	Arg	Ser	Val	Leu	Arg	Leu	Gly	Leu	Ala	Ser	Thr	Lys		
			290			295					300						
Leu	Thr	Cys	Glu	Gly	Ala	Val	Ala	Val	Ala	Glu	Phe	Ile	Ala	Glu	Ser		
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Pro	Arg	Leu	Leu	Arg	Leu	Asp	Leu	Arg	Glu	Asn	Glu	Ile	Lys	Thr	Gly		
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			340					345				350					
Arg	Leu	Asp	Leu	Asp	Arg	Glu	Pro	Lys	Lys	Glu	Ala	Val	Lys	Ser	Phe		
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Ile	Glu	Thr	Gln	Lys	Ala	Leu	Leu	Ala	Glu	Ile	Gln	Asn	Gly	Cys	Lys		
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				405				410					415				
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Pro	Ser	Pro	Asp	Ser	Asp	Ser	Asp	Ser	Asp	Ser	Asp	Gly	Glu	Glu	Glu		
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Glu	Glu	Glu	Glu	Gly	Glu	Arg	Asp	Glu	Thr	Pro	Ser	Gly	Ala	Ile	Asp		
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Thr	Arg	Asp	Thr	Gly	Ser	Glu	Pro	Gln	Pro	Pro	Pro	Glu	Pro	Pro	Pro		
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Cys	Gly	Leu	Glu	His	Glu	Leu	Ser	Cys	Ser	Lys	Asn	Glu	Lys	Glu	Leu				
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&lt;210&gt; 5317

&lt;211&gt; 889

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5317

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889

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&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5318

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Arg	Pro	Cys	Val	Ser	Gly	Thr	Val	Pro	Ser	Ser	Cys	Gln	Leu	Gly	Gly

	20		25		30										
Pro	Thr	Ser	Pro	Thr	Ser	Ala	Ala	Ser	Arg	Ala	Cys	Gly	Ser	Arg	Gly
	35					40					45				
Ala	Ala	Thr	Trp	Trp	Ser	Arg	Ser	Ser	Gly	Ser	Thr	Thr	Leu	Arg	Arg
	50				55					60					
Pro	Ser	Trp	Ala	Ser	Ser	Ser	Thr	Arg	Ala	Ser	Thr	Gly	Thr	Arg	Ser
65				70					75					80	
Pro	Ala	Ala	Ala	Ser	Arg	Arg	Pro	Cys	Gly	Ser	Pro	Ala	Arg	Gly	Arg
			85					90					95		
Thr	Ser	Trp	Ser	Ala	Arg	Tyr	Thr	Ser	Pro	Arg	Met	Trp	Thr	Lys	Met
	100						105						110		
Thr	Cys	Arg	Arg	Cys	Arg	Thr	Ser	Ala	Trp	Trp	Trp	Ala	Trp	Ser	Ser
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	130														

&lt;210&gt; 5319

&lt;211&gt; 4231

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5319

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<213> Homo sapiens

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&lt;210&gt; 5322

&lt;211&gt; 209

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5322

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&lt;210&gt; 5326

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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5326

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5327

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&lt;210&gt; 5328

&lt;211&gt; 694

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5328

Glu	His	Ser	Gly	Leu	Tyr	Val	Asn	Asn	Asn	Gly	Ile	Ile	Ser	Phe	Leu
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			20					25					30		
Arg	Cys	Val	Val	Ala	Ala	Phe	Trp	Ala	Asp	Val	Asp	Asn	Arg	Arg	Ala
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Gly	Asp	Val	Tyr	Tyr	Arg	Glu	Ala	Thr	Asp	Pro	Ala	Met	Leu	Arg	Arg

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 Ala Thr Trp Val Phe Val Ala Thr Trp Tyr Arg Val Thr Phe Phe Gly  
 85 90 95  
 Gly Ser Ser Ser Ser Pro Val Asn Thr Phe Gln Thr Val Leu Ile Thr  
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 Asp Gly Lys Leu Ser Phe Thr Ile Phe Asn Tyr Glu Ser Ile Val Trp  
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 Thr Thr Gly Thr His Ala Ser Ser Gly Gly Asn Ala Thr Gly Leu Gly  
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 Phe Ser Ile Pro Gly Ser Arg Thr Ala Asp Met Ala Glu Val Glu Thr  
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 Thr Thr Asn Val Gly Val Pro Gly Arg Trp Ala Phe Arg Ile Asp Asp  
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 Ala Gln Val Arg Val Gly Gly Cys Gly His Thr Thr Ser Val Cys Leu  
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 Thr Gly Asn Pro Ser Tyr Thr Cys Ser Cys Leu Ser Gly Phe Thr Gly  
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 Pro Ala Gly Phe Gly Gly Pro Thr Cys Glu Thr Ala Gln Ser Pro Cys  
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 Cys Val Asp Leu Val Gly Asn Tyr Thr Cys Leu Cys Ala Glu Pro Phe  
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 Lys Gly Leu Arg Cys Glu Thr Gly Asp His Pro Val Pro His Ala Cys  
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 Gly Phe Ser Val Asn Leu Lys Ser Gln Pro Xaa Pro Cys Asn Met Asn  
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 Thr Gln Cys Pro Asp Gly Gly Tyr Cys Met Glu His Gly Gly Ser Tyr  
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 Pro Cys Asp Ser Asp Pro Cys Phe Asn Gly Gly Ser Cys Asp Ala His

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 Lys Tyr Lys Cys Asp Cys Pro Pro Gly Phe Ser Gly Arg His Cys Glu  
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 Ile Ala Pro Ser Pro Cys Phe Arg Ser Pro Cys Val Asn Gly Gly Thr  
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 Cys Glu Asp Arg Asp Thr Asp Phe Phe Cys His Cys Gln Ala Gly Tyr  
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 Met Gly Arg Arg Cys Gln Ala Glu Val Asp Cys Gly Pro Pro Glu Glu  
 625 630 635 640  
 Val Lys His Ala Thr Leu Arg Phe Asn Gly Thr Arg Leu Gly Ala Val  
 645 650 655  
 Ala Leu Tyr Ala Cys Asp Arg Gly Tyr Ser Leu Ser Ala Pro Ser Arg  
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 Ile Arg Val Cys Gln Pro His Gly Val Trp Ser Glu Pro Pro Gln Cys  
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 Leu Gly Asp Ser Val Gly  
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&lt;210&gt; 5329

&lt;211&gt; 2582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5329

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<210> 5330

<211> 308

<212> PRT

<213> Homo sapiens

<400> 5330

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		20						25					30		
Ala	Leu	Arg	Lys	Lys	Glu	Leu	Asp	Glu	Glu	Glu	Ser	Ile	Arg	Lys	Lys
	35					40					45				
Ala	Val	Gln	Phe	Gly	Thr	Gly	Glu	Leu	Cys	Asp	Ala	Ile	Ser	Ala	Val
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Glu	Glu	Lys	Val	Ser	Tyr	Leu	Arg	Pro	Leu	Asp	Phe	Glu	Glu	Ala	Arg
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Glu	Leu	Phe	Leu	Leu	Gly	Gln	His	Tyr	Val	Phe	Glu	Ala	Lys	Glu	Phe
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Phe	Gln	Ile	Asp	Gly	Tyr	Val	Thr	Asp	His	Ile	Glu	Val	Val	Gln	Asp
			100					105					110		
His	Ser	Ala	Leu	Phe	Lys	Val	Leu	Ala	Phe	Phe	Glu	Thr	Asp	Met	Glu
		115					120						125		
Arg	Arg	Cys	Lys	Met	His	Lys	Arg	Arg	Ile	Ala	Met	Leu	Glu	Pro	Leu
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Thr	Val	Asp	Leu	Asn	Pro	Gln	Tyr	Tyr	Leu	Leu	Val	Asn	Arg	Gln	Ile
145				150					155					160	
Gln	Phe	Glu	Ile	Ala	His	Ala	Tyr	Tyr	Asp	Met	Met	Asp	Leu	Lys	Val
			165						170					175	
Ala	Ile	Ala	Asp	Arg	Leu	Arg	Asp	Pro	Asp	Ser	His	Ile	Val	Lys	Lys
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Ile	Asn	Asn	Leu	Asn	Lys	Ser	Ala	Leu	Lys	Tyr	Tyr	Gln	Leu	Phe	Leu
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Asp	Ser	Leu	Arg	Asp	Pro	Asn	Lys	Val	Phe	Pro	Glu	His	Ile	Gly	Glu
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Asp	Val	Leu	Arg	Pro	Ala	Met	Leu	Ala	Lys	Phe	Arg	Val	Ala	Arg	Leu
225					230					235				240	
Tyr	Gly	Lys	Ile	Ile	Thr	Ala	Asp	Pro	Lys	Lys	Glu	Leu	Glu	Asn	Leu
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	260		265		270										
His	Pro	Glu	Ala	Ala	Gln	Glu	Ile	Glu	Val	Glu	Leu	Glu	Leu	Ser	Lys
	275					280						285			
Glu	Met	Val	Ser	Leu	Leu	Pro	Thr	Lys	Met	Glu	Arg	Phe	Arg	Thr	Lys
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Met	Ala	Leu	Thr												
305															

&lt;210&gt; 5331

&lt;211&gt; 1069

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5331

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&lt;210&gt; 5332

&lt;211&gt; 61

&lt;212&gt; PRT

<213> Homo sapiens

<400> 5332

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Lys	Gln	Lys	Arg	Ala	Asn	His	Arg	Glu	Arg	Asn	Lys	Thr	Arg	Gly	Lys
		20					25					30			
Met	Ile	Thr	Asp	Ser	Gly	Lys	Phe	Ser	Gly	Ser	Ser	Pro	Ala	Pro	Pro
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Ser	Gln	Pro	Gln	Gly	Leu	Ser	Tyr	Ala	Xaa	Gly	Arg	Gly			
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<210> 5333

<211> 883

<212> DNA

<213> Homo sapiens

<400> 5333

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<210> 5334

<211> 269

<212> PRT

<213> Homo sapiens

&lt;400&gt; 5334

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 Glu Ile Arg Gly Ser Arg Ala Arg Ala Leu Pro Asp Arg Ala Leu Val  
 85 90 95  
 Asn Cys Gln Tyr Ser Ser Ala Thr Phe Ser Thr Gly Glu Arg Lys Arg  
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 Arg Pro His Gly Asp Arg Lys Ser Cys Glu Met Gly Leu Gln Leu Arg  
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 Gln Thr Phe Glu Ala Ala Ile Leu Thr Gln Leu His Pro Arg Ser Gln  
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 Ile Asp Ile Tyr Val Gln Val Leu Gln Ala Asp Gly Gly Thr Tyr Ala  
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 Ala Cys Val Asn Ala Ala Thr Leu Ala Val Leu Asp Ala Gly Ile Pro  
 165 170 175  
 Met Arg Asp Phe Val Cys Ala Cys Ser Ala Gly Phe Val Asp Gly Thr  
 180 185 190  
 Ala Leu Ala Asp Leu Ser His Val Glu Glu Ala Ala Gly Gly Pro Gln  
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 210 215 220  
 Met Asp Ala Arg Leu His Glu Asp His Leu Glu Arg Val Leu Glu Ala  
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 Ala Ala Gln Ala Ala Arg Asp Val His Thr Leu Leu Asp Arg Val Val  
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 Arg Gln His Val Arg Glu Ala Ser Ile Leu Leu Gly Asp  
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&lt;210&gt; 5335

&lt;211&gt; 4282

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5335

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&lt;210&gt; 5336

&lt;211&gt; 766

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5336

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Thr	Leu	Arg	Leu	His	Pro	Asp	Ile	Phe	Leu	Pro	Ser	Glu	Ile	Cys	Asp
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Leu	Glu	Ala	Ile	Arg	Lys	Gln	Asp	Leu	Val	Glu	Leu	Tyr	Leu	Thr	Asn
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Cys	Glu	Lys	Leu	Ser	Ala	Lys	Ser	Leu	Gln	Thr	Leu	Arg	Ser	Phe	Ser
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Val Ser Leu Val Leu Tyr Asn Met Asp Leu Ser Asp Asp His Ile Arg
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Tyr Gln Glu Val Thr Val Gln Arg Asn Cys Cys Leu Thr Leu Cys Asn
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&lt;210&gt; 5337

&lt;211&gt; 2742

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5337

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<212> PRT

<213> Homo sapiens

<400> 5338

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<211> 847

<212> DNA

<213> Homo sapiens

<400> 5339

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<211> 217

<212> PRT

<213> Homo sapiens

<400> 5340

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Glu	Glu	Ser	Gln	Asp	Glu	Asp	Ala	Leu	Asn	Glu	Ile	Val	Arg	Cys		50	55	60	
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Arg	Trp	Ser	Ala	Lys	Tyr	Arg	Tyr	Asp	Lys	Glu	Trp	Leu	Asn	Asn	Gly	115	120	125	
Arg	Met	Cys	Gly	Leu	Ser	Phe	Phe	Lys	Glu	Asn	Tyr	Ser	His	Leu	Asn	130	135	140	
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Asn	Lys	His	His	Pro	Asp	Leu	His	Leu	Trp	Ala	Cys	Ser	Gly	Lys	Arg	180	185	190	
Lys	Asp	Gln	Asp	Gln	Ile	Ile	Ala	Gly	Val	Glu	Lys	Lys	Ile	Ala	Gln	195	200	205	
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&lt;211&gt; 2455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5341

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&lt;210&gt; 5342

&lt;211&gt; 690

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5342

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                          565                      570                      575  
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                          580                      585                      590  
 Lys Val Gly Met Ala Ala Val Gln Leu Ala Pro Gly Gln Thr Phe Asp  
                          595                      600                      605  
 Gly Glu Lys Leu Tyr Gln His Val Arg Ala Trp Leu Pro Ala Tyr Ala  
                          610                      615                      620  
 Thr Pro His Phe Ile Arg Ile Gln Asp Ala Met Glu Val Thr Ser Thr  
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 Phe Lys Leu Met Lys Thr Arg Leu Val Arg Glu Gly Phe Asn Val Gly  
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 Ile Val Val Asp Pro Leu Phe Val Leu Asp Asn Arg Ala Gln Ser Phe  
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 Lys Leu  
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&lt;210&gt; 5343

&lt;211&gt; 752

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5343

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 Glu Ile Leu Pro Ala Met Pro Thr Pro Arg Cys Ala Cys Ser Ser Ile  
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 1912

&lt;210&gt; 5346

&lt;211&gt; 534

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5346

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Gln	Asp	Gly	Met	Pro	Gly	Arg	Ser	Trp	Ala	Ser	Lys	Arg	Val	Ser	Glu
			20					25					30		
Ser	Val	Lys	Ala	Leu	Leu	Leu	Lys	Gly	Lys	Ala	Pro	Val	Asp	Pro	Glu
		35					40					45			
Cys	Thr	Ala	Lys	Val	Gly	Lys	Ala	His	Val	Tyr	Cys	Glu	Gly	Asn	Asp

50	55	60
Val Tyr Asp Val Met Leu Asn Gln Thr Asn Leu Gln Phe Asn Asn Asn		
65	70	75
Lys Tyr Tyr Leu Ile Gln Leu Leu Glu Asp Asp Ala Gln Arg Asn Phe		80
	85	90
Ser Val Trp Met Arg Trp Gly Arg Val Gly Lys Met Gly Gln His Ser		95
	100	105
Leu Val Ala Cys Ser Gly Asn Leu Asn Lys Ala Lys Glu Ile Phe Gln		110
	115	120
Lys Lys Phe Leu Asp Lys Thr Lys Asn Asn Trp Glu Asp Arg Glu Lys		125
	130	135
Phe Glu Lys Val Pro Gly Lys Tyr Asp Met Leu Gln Met Asp Tyr Ala		140
145	150	155
Thr Asn Thr Gln Asp Glu Glu Glu Thr Lys Lys Glu Glu Ser Leu Lys		160
	165	170
Ser Pro Leu Lys Pro Glu Ser Gln Leu Asp Leu Arg Val Gln Glu Leu		175
	180	185
Ile Lys Leu Ile Cys Asn Val Gln Ala Met Glu Glu Met Met Met Glu		190
	195	200
Met Lys Tyr Asn Thr Lys Lys Ala Pro Leu Gly Lys Leu Thr Val Ala		205
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Gln Ile Lys Ala Gly Tyr Gln Ser Leu Lys Lys Ile Glu Asp Cys Ile		220
225	230	235
Arg Ala Gly Gln His Gly Arg Ala Leu Met Glu Ala Cys Asn Glu Phe		240
	245	250
Tyr Thr Arg Ile Pro His Asp Phe Gly Leu Arg Thr Pro Pro Leu Ile		255
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Arg Thr Gln Lys Glu Leu Ser Glu Lys Ile Gln Leu Leu Glu Ala Leu		270
	275	280
Gly Asp Ile Glu Ile Ala Ile Lys Leu Val Lys Thr Glu Leu Gln Ser		285
	290	295
Pro Glu His Pro Leu Asp Gln His Tyr Arg Asn Leu His Cys Ala Leu		300
305	310	315
Arg Pro Leu Asp His Glu Ser Tyr Glu Phe Lys Val Ile Ser Gln Tyr		320
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Leu Gln Ser Thr His Ala Pro Thr His Ser Asp Tyr Thr Met Thr Leu		335
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Leu Asp Leu Phe Glu Val Glu Lys Asp Gly Glu Lys Glu Ala Phe Arg		350
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Glu Asp Leu His Asn Arg Met Leu Leu Trp His Gly Ser Arg Met Ser		365
	370	375
Asn Trp Val Gly Ile Leu Ser His Gly Leu Arg Ile Ala Pro Pro Glu		380
385	390	395
Ala Pro Ile Thr Gly Tyr Met Phe Gly Lys Gly Ile Tyr Phe Ala Asp		400
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Met Ser Ser Lys Ser Ala Asn Tyr Cys Phe Ala Ser Arg Leu Lys Asn		415
	420	425
Thr Gly Leu Leu Leu Leu Ser Glu Val Ala Leu Gly Gln Cys Asn Glu		430
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Leu Leu Glu Ala Asn Pro Lys Ala Glu Gly Leu Leu Gln Gly Lys His		445
	450	455
Ser Thr Lys Gly Leu Gly Lys Met Ala Pro Ser Ser Ala His Phe Val		460
465	470	475
Thr Leu Asn Gly Ser Thr Val Pro Leu Gly Pro Ala Ser Asp Thr Gly		480

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Tyr	Asn	Pro	Asn	Gln	Val	Arg	Met	Arg	Tyr	Leu	Leu	Lys	Val	Gln	Phe
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Asn	Phe	Leu	Gln	Leu	Trp										
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&lt;210&gt; 5347&lt;211&gt; 2893

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5347

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 Tyr Leu Leu Leu Pro Pro Pro Thr Leu Leu Gln Asp Glu Leu Leu Phe  
 35 40 45  
 Leu Gly Gly Pro Ala Ser Ser Ala Tyr Ala Leu Ser Pro Phe Ser Ala  
 50 55 60  
 Ser Gly Gly Trp Gly Arg Ala Gly His Leu His Pro Lys Gly Arg Glu  
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 Leu Asp Pro Ala Ala Pro Pro Glu Gly Gln Leu Leu Arg Glu Val Arg  
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 Ala Leu Gly Val Pro Phe Val Pro Arg Thr Ser Val Asp Ala Trp Leu  
 100 105 110  
 Val His Ser Val Ala Ala Gly Ser Ala Asp Glu Ala His Gly Leu Leu  
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 Gly Ala Ala Ala Ala Ser Ser Thr Gly Gly Ala Gly Ala Ser Val Asp  
 130 135 140  
 Gly Gly Ser Gln Ala Val Gln Gly Gly Cys Gly Asp Ser Arg Ala Ala  
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 Arg Ser Gly Pro Leu Asp Ala Gly Glu Glu Lys Ala Pro Ala Glu  
 165 170 175  
 Pro Thr Ala Gln Val Pro Asp Ala Gly Gly Cys Ala Ser Glu Glu Asn  
 180 185 190  
 Gly Val Leu Arg Glu Lys His Glu Ala Val Asp His Ser Ser Gln His  
 195 200 205  
 Glu Glu Asn Glu Glu Arg Val Ser Ala Gln Lys Glu Asn Ser Leu Gln  
 210 215 220  
 Gln Asn Asp Asp Asp Glu Asn Lys Ile Ala Glu Lys Pro Asp Trp Glu  
 225 230 235 240  
 Ala Glu Lys Thr Thr Glu Ser Arg Asn Glu Arg His Leu Asn Gly Thr  
 245 250 255  
 Asp Thr Ser Phe Ser Leu Glu Asp Leu Phe Gln Leu Leu Ser Ser Gln  
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 Pro Glu Asn Ser Leu Glu Gly Ile Ser Leu Gly Asp Ile Pro Leu Pro  
 275 280 285  
 Gly Ser Ile Ser Asp Gly Met Asn Ser Ser Ala His Tyr His Val Asn  
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 Phe Ser Gln Ala Ile Ser Gln Asp Val Asn Leu His Glu Ala Ile Leu  
 305 310 315 320  
 Leu Cys Pro Asn Asn Thr Phe Arg Arg Asp Pro Thr Ala Arg Thr Ser  
 325 330 335  
 Gln Ser Gln Glu Pro Phe Leu Gln Leu Asn Ser His Thr Thr Asn Pro

340 345 350  
 Glu Gln Thr Leu Pro Gly Thr Asn Leu Thr Gly Phe Leu Ser Pro Val  
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 Asp Asn His Met Arg Asn Leu Thr Ser Gln Asp Leu Leu Tyr Asp Leu  
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 Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu  
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 Tyr Cys Thr Asp His Glu Ser Ser Ser His His Asp Leu Glu Gly Ala  
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 Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu  
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 Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp  
 625 630 635 640  
 Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro  
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&lt;210&gt; 5349

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5349

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<400> 5350  
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 His Lys Val Ser Ser Gln Glu Gly Glu Gly Arg Ile Pro Leu Pro Gly  
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 Lys Ala Glu Val Arg Glu Ala Gly Gln Pro Ile Pro Val Ser Leu Leu  
 65 70 75 80  
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 85 90 95  
 Gly His Glu Gly Leu Gly Arg Leu Leu Trp Gln Ser Gly Pro Leu Gln  
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<210> 5352

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<213> Homo sapiens

<400> 5352

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		20					25					30			
Asn	Cys	Asp	Thr	Arg	Asn	Gly	Ser	Asn	Lys	Ser	Asp	Phe	Asp	Trp	His
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Gln	Asp	Ala	Leu	Ser	Lys	Ser	Leu	Gln	Gln	Asn	Leu	Pro	Ser	Arg	Ser
	50				55					60					
Val	Ser	Lys	Pro	Ser	Leu	Phe	Ser	Ser	Val	Gln	Leu	Tyr	Arg	Gln	Ser
65				70					75					80	
Ser	Lys	Met	Cys	Gly	Thr	Val	Phe	Thr	Gly	Ala	Ser	Arg	Phe	Arg	Cys
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<210> 5353

<211> 4217<212> DNA

<213> Homo sapiens

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 <213> Homo sapiens

<400> 5354  
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 Gln Val Cys Gln Phe Ser Asn Val Leu Arg Lys Gln Gly Ile Gln Lys  
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 Gly Asp Arg Val Ala Ile Tyr Met Pro Met Ile Pro Glu Leu Val Val  
 65 70 75 80  
 Ala Met Leu Ala Cys Ala Arg Ile Gly Ala Leu His Ser Ile Val Phe  
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 Ala Gly Phe Ser Ser Glu Ser Leu Cys Glu Arg Ile Leu Asp Ser Ser  
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 Cys Ser Leu Ile Thr Thr Asp Ala Phe Tyr Arg Gly Glu Lys Leu  
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 Lys Gly Phe Pro Val Arg Cys Cys Ile Val Val Lys His Leu Gly Arg  
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 Ala Glu Leu Gly Met Gly Thr Pro Pro Ala Ser Pro Pro Gln Leu Arg  
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 Cys Asp Ala Glu Asp Pro Leu Phe Ile Leu Tyr Thr Ser Gly Ser Thr  
 210 215 220  
 Gly Lys Pro Lys Gly Val Val His Thr Val Gly Gly Tyr Met Leu Tyr  
 225 230 235 240  
 Val Ala Thr Thr Phe Lys Tyr Val Phe Asp Phe His Ala Glu Asp Val  
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 Phe Trp Cys Thr Ala Asp Ile Gly Trp Ile Thr Gly His Ser Tyr Val  
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 Thr Tyr Gly Pro Leu Ala Asn Gly Ala Thr Ser Val Leu Phe Glu Gly

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Tyr Lys Val Thr Lys Phe Tyr Thr Ala Pro Thr Ala Ile Arg Leu Leu		
305	310	315
Met Lys Phe Gly Asp Glu Pro Val Thr Lys His Ser Arg Ala Ser Leu		
325	330	335
Gln Val Leu Gly Thr Val Gly Glu Pro Ile Asn Pro Glu Ala Trp Leu		
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Trp Tyr His Arg Val Val Gly Ala Gln Arg Cys Pro Ile Val Asp Thr		
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Ala Pro Ala Ile Leu Asn Glu Ser Gly Glu Glu Leu Glu Gly Glu Ala		
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Glu Gly Tyr Leu Val Phe Lys Gln Pro Trp Pro Gly Ile Met Arg Thr		
420	425	430
Val Tyr Gly Asn His Glu Arg Phe Glu Thr Thr Tyr Ser Lys Lys Phe		
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Pro Gly Tyr Tyr Val Thr Gly Asp Gly Cys Gln Arg Asp Gln Asp Gly		
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Tyr Tyr Trp Ile Thr Gly Arg Ile Asp Asp Met Leu Asn Val Ser Gly		
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Ala Val Ala Glu Ala Ala Val Val Gly His Pro His Pro Val Lys Gly		
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515	520	525
Pro Lys Leu Thr Glu Glu Leu Lys Lys Gln Ile Arg Glu Lys Ile Gly		
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Pro Ile Ala Thr Pro Asp Tyr Ile Gln Asn Ala Pro Gly Leu Pro Lys		
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Thr Arg Ser Gly Lys Ile Met Arg Arg Val Leu Arg Lys Ile Ala Gln		
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Asn Asp His Asp Leu Gly Asp Met Ser Thr Val Ala Asp Pro Ser Val		
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Ile Ser His Leu Phe Ser His Arg Cys Leu Thr Ile Gln		
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&lt;210&gt; 5355

&lt;211&gt; 1596

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5355

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1500  
cctgaatttc agtgacacat agtgcagccc ggcagtgtcc cacttccgtg gagagagccg  
1560  
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1596

&lt;210&gt; 5356

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5356

Arg Lys Cys Ile Glu Asp Val Ile His Phe Ala Trp Glu Glu Lys Leu  
 1 5 10 15  
 Phe Leu Leu Ala Asp Glu Val Tyr Gln Asp Asn Val Tyr Ser Pro Asp  
 20 25 30  
 Cys Arg Phe His Ser Phe Lys Lys Val Leu Tyr Glu Met Gly Pro Glu  
 35 40 45  
 Tyr Ser Ser Asn Val Glu Leu Ala Ser Phe His Ser Thr Ser Lys Gly  
 50 55 60  
 Tyr Met Gly Glu Cys Gly Tyr Arg Gly Gly Tyr Met Glu Val Val Asn  
 65 70 75 80  
 Leu His Pro Glu Ile Lys Gly Gln Leu Val Lys Leu Leu Ser Val Arg  
 85 90 95  
 Leu Cys Pro Pro Val Ser Gly Gln Ala Ala Met Asp Ile Val Val Asn  
 100 105 110  
 Pro Pro Val Ala Gly Glu Glu Ser Phe Glu Gln Phe Ser Arg Glu Lys  
 115 120 125  
 Glu Ser Val Leu Gly Asn Leu Ala Lys Lys Ala Lys Leu Thr Glu Asp  
 130 135 140  
 Leu Phe Asn Gln Val Pro Gly Ile His Cys Asn Pro Leu Gln Gly Ala  
 145 150 155 160  
 Met Tyr Ala Phe Pro Arg Ile Phe Ile Pro Ala Lys Ala Val Glu Ala  
 165 170 175  
 Ala Gln Ala His Gln Met Ala Pro Asp Met Phe Tyr Cys Met Lys Leu  
 180 185 190  
 Leu Glu Glu Thr Gly Ile Cys Val Val Pro Gly Ser Gly Phe Gly Gln  
 195 200 205  
 Arg Glu Gly Thr Tyr His Phe Arg Met Thr Ile Leu Pro Pro Val Glu  
 210 215 220  
 Lys Leu Lys Thr Val Leu Gln Lys Val Lys Asp Phe His Ile Asn Phe  
 225 230 235 240  
 Leu Glu Lys Tyr Ala  
 245

&lt;210&gt; 5357

&lt;211&gt; 1722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5357

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 acgagccccg tcctgctggc ctccctgggg gtggggctgg tcaactctgct cggcctggct  
 120  
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 180  
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 240  
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 300  
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 360  
 gaggatcaag gctatgtgga tcttgtcatc aaggtctacc tgaagggtgt gcaccccaaa  
 420

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 480  
 gagtttcggg ggccaagcgg gttgctcact tacactggaa aagggcattt taacattcag  
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 cccaacaaga aatctccacc agaaccccgga gtggcgaaga aactgggaat gattgccggc  
 600  
 gggacaggaa tcacccaat gctacagctg atccgggcca tcctgaaagt ccctgaagat  
 660  
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 780  
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 1260  
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 1320  
 cagtctgtgc aatgggtttt acttaaaactt cactgttcaa cctatgagca aatctgtatg  
 1380  
 tgtgagtata agttgagcat agcatacttc cagaggtggt cttatggaga tggcaagaaa  
 1440  
 ggaggaaatg atttcttcag atctcaaagg agtctgaaat atcatatttc tgtgtgtgtc  
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 1680  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa  
 1722

&lt;210&gt; 5358

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5358

Ser Gly Ile Cys Arg Leu Val Arg Trp Trp Arg Lys Arg Arg Ser Val  
 1 5 10 15  
 Met Gly Ile Gln Thr Ser Pro Val Leu Leu Ala Ser Leu Gly Val Gly



20 25 30  
 Leu Val Thr Leu Leu Gly Leu Ala Val Gly Ser Tyr Leu Val Arg Arg  
 35 40 45  
 Ser Arg Arg Pro Gln Val Thr Leu Leu Asp Pro Asn Glu Lys Tyr Leu  
 50 55 60  
 Leu Arg Leu Leu Asp Lys Thr Thr Val Ser His Asn Thr Lys Arg Phe  
 65 70 75 80  
 Arg Phe Ala Leu Pro Thr Ala His His Thr Leu Gly Leu Pro Val Gly  
 85 90 95  
 Lys His Ile Tyr Leu Ser Thr Arg Ile Asp Gly Ser Leu Val Ile Arg  
 100 105 110  
 Pro Tyr Thr Pro Val Thr Ser Asp Glu Asp Gln Gly Tyr Val Asp Leu  
 115 120 125  
 Val Ile Lys Val Tyr Leu Lys Gly Val His Pro Lys Phe Pro Glu Gly  
 130 135 140  
 Gly Lys Met Ser Gln Tyr Leu Asp Ser Leu Lys Val Gly Asp Val Val  
 145 150 155 160  
 Glu Phe Arg Gly Pro Ser Gly Leu Leu Thr Tyr Thr Gly Lys Gly His  
 165 170 175  
 Phe Asn Ile Gln Pro Asn Lys Lys Ser Pro Pro Glu Pro Arg Val Ala  
 180 185 190  
 Lys Lys Leu Gly Met Ile Ala Gly Gly Thr Gly Ile Thr Pro Met Leu  
 195 200 205  
 Gln Leu Ile Arg Ala Ile Leu Lys Val Pro Glu Asp Pro Thr Gln Cys  
 210 215 220  
 Phe Leu Leu Phe Ala Asn Gln Thr Glu Lys Asp Ile Ile Leu Arg Glu  
 225 230 235 240  
 Asp Leu Glu Glu Leu Gln Ala Arg Tyr Pro Asn Arg Phe Lys Leu Trp  
 245 250 255  
 Phe Thr Leu Asp His Pro Pro Lys Asp Trp Ala Tyr Ser Lys Gly Phe  
 260 265 270  
 Val Thr Ala Asp Met Ile Arg Glu His Leu Pro Ala Pro Gly Asp Asp  
 275 280 285  
 Val Leu Val Leu Leu Cys Gly Pro Pro Pro Met Val Gln Leu Ala Cys  
 290 295 300  
 His Pro Asn Leu Asp Lys Leu Gly Tyr Ser Gln Lys Met Arg Phe Thr  
 305 310 315 320  
 Tyr

&lt;210&gt; 5359

&lt;211&gt; 5003

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5359

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 cgcctcccag cctgctatgg gatggatgaa gaagagaacc actatgtctc gcagctcagg  
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 180  
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 240

ggaaacgacc atttcgccag ggttaacttt gaggaattta aggaaggttt tgtggctgtg  
 300  
 ttgtcttcaa atgctgggtg tcgcccctca gatgaagaca gtagttcttt ggaatcagct  
 360  
 gcctccagtg ccatccctcc aaagtatgtg aatgggttcta agtgggtatgg ccgtcggagc  
 420  
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 480  
 gccagcctga aaagtcacct ctggcgctca gcgtctcttg agagcgtgga gagtcccaag  
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 1860

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1920  
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1980  
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5003

&lt;210&gt; 5360

&lt;211&gt; 1406

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5360

Gly Thr Gly Val Val Pro Arg Ser Trp Pro Arg Ala Gly Gly Arg Arg  
 1 5 10 15  
 Arg Arg Leu Pro Ala Cys Tyr Gly Met Asp Glu Glu Glu Asn His Tyr  
 20 25 30  
 Val Ser Gln Leu Arg Glu Val Tyr Ser Ser Cys Asp Thr Thr Gly Thr  
 35 40 45  
 Gly Phe Leu Asp Arg Gln Glu Leu Thr Gln Leu Cys Leu Lys Leu His  
 50 55 60  
 Leu Glu Gln Gln Leu Pro Val Leu Leu Gln Thr Leu Leu Gly Asn Asp  
 65 70 75 80  
 His Phe Ala Arg Val Asn Phe Glu Glu Phe Lys Glu Gly Phe Val Ala  
 85 90 95  
 Val Leu Ser Ser Asn Ala Gly Val Arg Pro Ser Asp Glu Asp Ser Ser  
 100 105 110  
 Ser Leu Glu Ser Ala Ala Ser Ser Ala Ile Pro Pro Lys Tyr Val Asn  
 115 120 125  
 Gly Ser Lys Trp Tyr Gly Arg Arg Ser Arg Pro Glu Leu Cys Asp Ala  
 130 135 140  
 Ala Thr Glu Ala Arg Arg Val Pro Glu Gln Gln Thr Gln Ala Ser Leu  
 145 150 155 160  
 Lys Ser His Leu Trp Arg Ser Ala Ser Leu Glu Ser Val Glu Ser Pro  
 165 170 175  
 Lys Ser Asp Glu Glu Ala Glu Ser Thr Lys Glu Ala Gln Asn Glu Leu  
 180 185 190  
 Phe Glu Ala Gln Gly Gln Leu Gln Thr Trp Asp Ser Glu Asp Phe Gly  
 195 200 205  
 Ser Pro Gln Lys Ser Cys Ser Pro Ser Phe Asp Thr Pro Glu Ser Gln  
 210 215 220  
 Ile Arg Gly Val Trp Glu Glu Leu Gly Val Gly Ser Ser Gly His Leu  
 225 230 235 240  
 Ser Glu Gln Glu Leu Ala Val Val Cys Gln Ser Val Gly Leu Gln Gly  
 245 250 255  
 Leu Glu Lys Glu Glu Leu Glu Asp Leu Phe Asn Lys Leu Asp Gln Asp  
 260 265 270  
 Gly Asp Gly Lys Val Ser Leu Glu Glu Phe Gln Leu Gly Leu Phe Ser  
 275 280 285  
 His Glu Pro Ala Leu Leu Leu Glu Ser Ser Thr Arg Val Lys Pro Ser  
 290 295 300  
 Lys Ala Trp Ser His Tyr Gln Val Pro Glu Glu Ser Gly Cys His Thr  
 305 310 315 320  
 Thr Thr Thr Ser Ser Leu Val Ser Leu Cys Ser Ser Leu Arg Leu Phe  
 325 330 335  
 Ser Ser Ile Asp Asp Gly Ser Gly Phe Ala Phe Pro Asp Gln Val Leu  
 340 345 350  
 Ala Met Trp Thr Gln Glu Gly Ile Gln Asn Gly Arg Glu Ile Leu Gln  
 355 360 365  
 Ser Leu Asp Phe Ser Val Asp Glu Lys Val Asn Leu Leu Glu Leu Thr  
 370 375 380  
 Trp Ala Leu Asp Asn Glu Leu Met Thr Val Asp Ser Ala Val Gln Gln

385					390					395					400
Ala	Ala	Leu	Ala	Cys	Tyr	His	Gln	Glu	Leu	Ser	Tyr	Gln	Gln	Gly	Gln
				405					410					415	
Val	Glu	Gln	Leu	Ala	Arg	Glu	Arg	Asp	Lys	Ala	Arg	Gln	Asp	Leu	Glu
			420					425					430		
Arg	Ala	Glu	Lys	Arg	Asn	Leu	Glu	Phe	Val	Lys	Glu	Met	Asp	Asp	Cys
		435					440					445			
His	Ser	Thr	Leu	Glu	Gln	Leu	Thr	Glu	Lys	Lys	Ile	Lys	His	Leu	Glu
	450					455					460				
Gln	Gly	Tyr	Arg	Glu	Arg	Leu	Ser	Leu	Leu	Arg	Ser	Glu	Val	Glu	Ala
465						470				475					480
Glu	Arg	Glu	Leu	Phe	Trp	Glu	Gln	Ala	His	Arg	Gln	Arg	Ala	Ala	Leu
				485					490					495	
Glu	Trp	Asp	Val	Gly	Arg	Leu	Gln	Ala	Glu	Glu	Ala	Gly	Leu	Arg	Glu
			500					505					510		
Lys	Leu	Thr	Leu	Ala	Leu	Lys	Glu	Asn	Ser	Arg	Leu	Gln	Lys	Glu	Ile
		515					520					525			
Val	Glu	Val	Val	Glu	Lys	Leu	Ser	Asp	Ser	Glu	Arg	Leu	Ala	Leu	Lys
	530					535					540				
Leu	Gln	Lys	Asp	Leu	Glu	Phe	Val	Leu	Lys	Asp	Lys	Leu	Glu	Pro	Gln
545					550					555					560
Ser	Ala	Glu	Leu	Leu	Ala	Gln	Glu	Glu	Arg	Phe	Ala	Ala	Val	Leu	Lys
				565					570					575	
Glu	Tyr	Glu	Leu	Lys	Cys	Arg	Asp	Leu	Gln	Asp	Arg	Asn	Asp	Glu	Leu
			580					585					590		
Gln	Ala	Glu	Leu	Glu	Gly	Leu	Trp	Ala	Arg	Leu	Pro	Lys	Asn	Arg	His
		595					600					605			
Ser	Pro	Ser	Trp	Ser	Pro	Asp	Gly	Arg	Arg	Arg	Gln	Leu	Pro	Gly	Leu
	610					615					620				
Gly	Pro	Ala	Gly	Ile	Ser	Phe	Leu	Gly	Asn	Ser	Ala	Pro	Val	Ser	Ile
625					630					635					640
Glu	Thr	Glu	Leu	Met	Met	Glu	Gln	Val	Lys	Glu	His	Tyr	Gln	Asp	Leu
				645					650					655	
Arg	Thr	Gln	Leu	Glu	Thr	Lys	Val	Asn	Tyr	Tyr	Glu	Arg	Glu	Ile	Ala
			660					665					670		
Ala	Leu	Lys	Arg	Asn	Phe	Glu	Lys	Glu	Arg	Lys	Asp	Met	Glu	Gln	Ala
		675					680					685			
Arg	Arg	Arg	Glu	Val	Ser	Val	Leu	Glu	Gly	Gln	Lys	Ala	Asp	Leu	Glu
						695					700				
Glu	Leu	His	Glu	Lys	Ser	Gln	Glu	Val	Ile	Trp	Gly	Leu	Gln	Glu	Gln
705					710					715					720
Leu	Gln	Asp	Thr	Ala	Arg	Gly	Pro	Glu	Pro	Glu	Gln	Met	Gly	Leu	Ala
				725					730					735	
Pro	Cys	Cys	Thr	Gln	Ala	Leu	Cys	Gly	Leu						

820										825					830						
Leu	Glu	Leu	Ala	Arg	Gly	Lys	Arg	Val	Asp	Gly	Pro	Ser	Leu	Glu	Ala						
835										840					845						
Glu	Met	Gln	Ala	Leu	Pro	Lys	Asp	Gly	Leu	Val	Ala	Gly	Ser	Gly	Gln						
850										855					860						
Glu	Gly	Thr	Arg	Gly	Leu	Leu	Pro	Leu	Arg	Pro	Gly	Cys	Gly	Glu	Arg						
865										870					875					880	
Pro	Leu	Ala	Trp	Leu	Ala	Pro	Gly	Asp	Gly	Arg	Glu	Ser	Glu	Glu	Ala						
885										890					895						
Ala	Gly	Ala	Gly	Pro	Arg	Arg	Arg	Gln	Ala	Gln	Asp	Thr	Glu	Ala	Thr						
900										905					910						
Gln	Ser	Pro	Ala	Pro	Ala	Pro	Ala	Pro	Ala	Ser	His	Gly	Pro	Ser	Glu						
915										920					925						
Arg	Trp	Ser	Arg	Met	Gln	Pro	Cys	Gly	Val	Asp	Gly	Asp	Ile	Val	Pro						
930										935					940						
Lys	Glu	Pro	Glu	Pro	Phe	Gly	Ala	Ser	Ala	Ala	Gly	Leu	Glu	Gln	Pro						
945										950					955					960	
Gly	Ala	Arg	Glu	Leu	Pro	Leu	Leu	Gly	Thr	Glu	Arg	Asp	Ala	Ser	Gln						
965										970					975						
Thr	Gln	Pro	Arg	Met	Trp	Glu	Pro	Pro	Leu	Arg	Pro	Ala	Ala	Ser	Cys						
980										985					990						
Arg	Gly	Gln	Ala	Glu	Arg	Leu	Gln	Ala	Ile	Gln	Glu	Glu	Arg	Ala	Arg						
995										1000					1005						
Ser	Trp	Ser	Arg	Gly	Thr	Gln	Glu	Gln	Ala	Ser	Glu	Gln	Gln	Ala	Arg						
1010										1015					1020						
Ala	Glu	Gly	Ala	Leu	Glu	Pro	Gly	Cys	His	Lys	His	Ser	Val	Glu	Val						
1025										1030					1035					1040	
Ala	Arg	Arg	Gly	Ser	Leu	Pro	Ser	His	Leu	Gln	Leu	Ala	Asp	Pro	Gln						
1045										1050					1055						
Gly	Ser	Trp	Gln	Glu	Gln	Leu	Ala	Ala	Pro	Glu	Glu	Gly	Glu	Thr	Lys						
1060										1065					1070						
Ile	Ala	Leu	Glu	Arg	Glu	Lys	Asp	Asp	Met	Glu	Thr	Lys	Leu	Leu	His						
1075										1080					1085						
Leu	Glu	Asp	Val	Val	Arg	Ala	Leu	Glu	Lys	His	Val	Asp	Leu	Arg	Glu						
1090										1095					1100						
Asn	Asp	Arg	Leu	Glu	Phe	His	Arg	Leu	Ser	Glu	Glu	Asn	Thr	Leu	Leu						
1105										1110					1115					1120	
Lys	Asn	Asp	Leu	Gly	Arg	Val	Arg	Gln	Glu	Leu	Glu	Ala	Ala	Glu	Ser						
1125										1130					1135						
Thr	His	Asp	Ala	Gln	Arg	Lys	Glu	Ile	Glu	Val	Leu	Lys	Lys	Asp	Lys						
1140										1145					1150						
Glu	Lys	Ala	Cys	Ser	Glu	Met	Glu	Val	Leu	Asn	Arg	Gln	Asn	Gln	Asn						
1155										1160					1165						
Tyr	Lys	Asp	Gln	Leu	Ser	Gln	Leu	Asn	Val	Arg	Val	Leu	Gln	Leu	Gly						
1170										1175					1180						
Gln	Glu	Ala	Ser	Thr	His</																

1250                      1255                      1260  
 Arg Gln Ala Gln Ala Gln His Leu Gln Glu Val Arg Leu Val Pro Gln  
 1265                      1270                      1275                      1280  
 Asp Arg Val Ala Glu Leu His Arg Leu Leu Ser Leu Gln Gly Glu Gln  
                     1285                      1290                      1295  
 Ala Arg Arg Arg Leu Asp Ala Gln Arg Glu Glu His Glu Lys Gln Leu  
                     1300                      1305                      1310  
 Lys Ala Thr Glu Glu Arg Val Glu Glu Ala Glu Met Ile Leu Lys Asn  
                     1315                      1320                      1325  
 Met Glu Met Leu Leu Gln Glu Lys Val Asp Lys Leu Lys Glu Gln Phe  
                     1330                      1335                      1340  
 Glu Lys Asn Thr Lys Ser Asp Leu Leu Leu Lys Glu Leu Tyr Val Glu  
 1345                      1350                      1355                      1360  
 Asn Ala His Leu Val Arg Ala Leu Gln Ala Thr Glu Glu Lys Gln Arg  
                     1365                      1370                      1375  
 Gly Ala Glu Lys Gln Ser Arg Leu Leu Glu Glu Lys Val Arg Ala Leu  
                     1380                      1385                      1390  
 Asn Lys Leu Val Ser Arg Ile Ala Pro Ala Ala Leu Ser Val  
                     1395                      1400                      1405

&lt;210&gt; 5361

&lt;211&gt; 1080

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5361

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 120  
 gggcttctctg ggctccggc agatggagga tggcattaaa tgccaacaca gtcagcttac  
 180  
 catccacaag gccagcagct gccaacagct gccctagacc tatcaacaag acaacttcat  
 240  
 ggctcccaat gggaatggag gctgggcccgc ccctacttag agcaggggaa agaacttttc  
 300  
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 360  
 taggaagtgg aatttgctgc cctaggcgtg gtctaaagga caagtttaga aatgattcaa  
 420  
 ctcaagttcc taaacagagt aagtgccagt tgatgtccca ccgtggatcc tttactccag  
 480  
 aaaaattgta atgatggctc ggccaccgcc ttggctagag tccactgca cgcgtgtcgt  
 540  
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 600  
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 660  
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 720  
 caccgccag cacgcccagc ttttttttgt attttagta gagacggggt tttatcatgt  
 780  
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 840



tgctgggacc acaggcgtga gccaccgcgc ccggccgtct gtctgggtttt caaaccaatc  
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 960  
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 1080

<210> 5362

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5362

Cys	Pro	Thr	Val	Asp	Pro	Leu	Leu	Gln	Lys	Asn	Cys	Asn	Asp	Gly	Ser
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Ala	Thr	Ala	Leu	Ala	Arg	Val	Pro	Leu	His	Ala	Cys	Arg	Glu	Gly	Arg
			20					25					30		
Trp	Ala	Ser	Pro	Ser	Gly	Phe	Phe	Cys	Cys	Cys	Cys	Cys	Phe	Leu	Arg
	35					40						45			
Trp	Ser	Leu	Ala	Leu	Xaa	Ala	Gln	Thr	Glu	Val	Gln	Arg	Pro	Asp	Leu
	50				55						60				
Asn	Ser	Leu	Gln	Pro	Pro	Pro	Gly	Phe	Lys	Gly	Phe	Ser	Cys	Leu	
65				70				75					80		
Ser	Leu	Leu	Ser	Ser	Trp	Asp	Tyr	Arg	His	Pro	Pro	Ala	Arg	Pro	Ala
			85			90						95			
Phe	Phe	Cys	Ile	Phe	Ser	Arg	Asp	Gly	Val	Leu	Ser	Cys	Trp	Pro	Gly
		100				105						110			
Trp	Ser	Arg	Thr	Pro	Asp	Leu	Met	Xaa	Ser	Thr	Arg	Leu	Gly	Leu	Pro
		115				120					125				
Asn	Cys	Trp	Asp	His	Arg	Arg	Glu	Pro	Pro	Arg	Pro	Ala	Val	Cys	Leu
	130				135						140				
Val	Phe	Lys	Pro	Ile	Asn	Glu	Pro	Val	Ser	Leu	Phe	Gly	Ile	Tyr	Asn
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Asn	Glu	Lys	Ile	His											
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<210> 5363

<211> 894

<212> DNA

<213> Homo sapiens

<400> 5363

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 120  
 cggcgttgca ccggctctgt gaggacctcc cctctgagca cttcccttgt gacaggccac  
 180  
 ttcccttgtg acaggcccag gacgaggtgg ccaggcggcc cccatggcgt ccctggctta  
 240  
 ggccggagaac cgcctgggcg atgagtgaga acctcgacaa cgagggcccg aagcccatgg  
 300

agagctgtgg ccaggagagc agcagtgtccc tgagctgtccc taccgtctcg gtgccccctg  
 360  
 cagccccggc agccctggag gaggtggaga aagagggcgc tggggcggct acagggcncg  
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 480  
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 600  
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 720  
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 840  
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 894

&lt;210&gt; 5364

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5364

Ala	Ala	Leu	Pro	Ser	Arg	Cys	Pro	Leu	Gln	Pro	Arg	Gln	Pro	Trp	Arg
1				5					10					15	
Arg	Trp	Arg	Lys	Arg	Ala	Leu	Gly	Arg	Leu	Gln	Gly	Xaa	Gly	Pro	Gln
			20					25					30		
Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
		35				40					45				
Phe	Lys	Leu	Glu	Leu	Gln	Asn	Ala	Pro	Arg	His	Ala	Ser	Phe	Ser	Asp
	50				55					60					
Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
65				70				75						80	
Leu	Phe	Gly	Gln	Pro	Pro	Cys	Ala	Phe	Val	Thr	Phe	Arg	Ser	Ala	Ala
			85					90					95		
Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
		100						105					110		
Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
	115					120						125			
Gly	Gly	Gly	Xaa	Gln	Glu	Gly	Glu	Ser	Glu	Pro	Pro	Val	Thr	Arg	Xaa
	130				135					140					
Gly	Arg	Arg	Gly	Asp	Pro	Ser	Met	Asp	Ser	Ala	Leu	Xaa	Leu	Ser	Ser
145				150				155						160	
Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
			165					170					175		
Gln	Glu	Ile	Gly	Ser	Thr	Asn	Arg	Ala	Leu	Arg					
		180						185							

&lt;210&gt; 5365

&lt;211&gt; 1824

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5365

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ccccgcgagt ccctcaagcg ggaacctgcc tcgtgtctcc caggagccat ggaggctgtg  
120  
gaactcgcca gaaaactgca ggaggaagct acgtgctcca tctgtctgga ttacttcaca  
180  
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240  
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420  
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480  
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540  
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600  
gccagggagg agcagagctt agccgagtgg cagggcaagg tgaaggagcg gagagaacgc  
660  
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720  
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780  
ctggaccggc agggtcactc tctggagctg ctgctgctgc agctggagga gcggagcaca  
840  
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900  
agtgtgcagt gcccagaggt tgcccccca accagacca ggactgtgtg cagagttccc  
960  
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1020  
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1260  
gaaaacggct tctgggtggg gcagctgtcc aaggggacca agtacttatc caccttctct  
1320  
gccctaacc cggtcatgct gatggagcct ccagccaca tgggcatctt cctggacttc  
1380  
gaagccgggg aagtgtcctt ctacagtgtg agcgatgggt cccacctgca cacctactcc  
1440  
cagggcacct tcccaggccc cctgcagcct ttcttctgcc tgggggctcc gaagtctggt  
1500

cagatggtca tctccacagt gaccatgtgg gtgaaaggat agacacagac cggggggactc  
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 1620  
 agggttctct ggcattcacgc tggcagccat tagacacaca gggggggtttc tcaaattcta  
 1680  
 aatataattg tgattagaac tgtcaaacat taagagggtta tactgacaga tgcttcctag  
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 1800  
 accaaaaaaa aaaaaaagtc gagc  
 1824

<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

Met	Glu	Ala	Val	Glu	Leu	Ala	Arg	Lys	Leu	Gln	Glu	Glu	Ala	Thr	Cys
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Ser	Ile	Cys	Leu	Asp	Tyr	Phe	Thr	Asp	Pro	Val	Met	Thr	Thr	Cys	Gly
		20						25					30		
His	Asn	Phe	Cys	Arg	Ala	Cys	Ile	Gln	Leu	Ser	Trp	Glu	Lys	Ala	Arg
		35					40					45			
Gly	Lys	Lys	Gly	Arg	Arg	Lys	Arg	Lys	Gly	Ser	Phe	Pro	Cys	Pro	Glu
	50					55				60					
Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
65					70				75					80	
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
				85				90					95		
Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
		100						105					110		
Asp	Gln	Ser	Pro	Ile	Cys	Val	Val	Cys	Arg	Glu	Ser	Arg	Glu	His	Arg
		115					120					125			
Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
	130					135				140					
Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
145					150				155					160	
Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
			165					170					175		
Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
			180				185					190			
Asn	Leu	Tyr	Leu	Val	Glu	Glu	Glu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
	195						200					205			
Thr	Glu	Glu	Glu	Glu	Thr	Ala	Ser	Arg	Leu	Arg	Glu	Ser	Val	Ala	Cys
	210					215					220				
Leu	Asp	Arg	Gln	Gly	His	Ser	Leu	Glu	Leu	Leu	Leu	Gln	Leu	Glu	
225					230				235					240	
Glu	Arg	Ser	Thr	Gln	Gly	Pro	Leu	Gln	Met	Leu	Gln	Asp	Met	Lys	Glu
				245					250				255		
Pro	Leu	Ser	Arg	Lys	Asn	Asn	Val	Ser	Val	Gln	Cys	Pro	Glu	Val	Ala
			260					265					270		
Pro	Pro	Thr	Arg	Pro	Arg	Thr	Val	Cys	Arg	Val	Pro	Gly	Gln	Ile	Glu

275                      280                      285  
 Val Leu Arg Gly Phe Leu Glu Asp Val Val Pro Asp Ala Thr Ser Ala  
 290                      295                      300  
 Tyr Pro Tyr Leu Leu Leu Tyr Glu Ser Arg Gln Arg Arg Tyr Leu Gly  
 305                      310                      315                      320  
 Ser Ser Pro Glu Gly Ser Gly Phe Cys Ser Lys Asp Arg Phe Val Ala  
 325                      330                      335  
 Tyr Pro Cys Ala Val Gly Gln Thr Ala Phe Ser Ser Gly Arg His Tyr  
 340                      345                      350  
 Trp Glu Val Gly Met Asn Ile Thr Gly Asp Ala Leu Trp Ala Leu Gly  
 355                      360                      365  
 Val Cys Arg Asp Asn Val Ser Arg Lys Asp Arg Val Leu Lys Cys Pro  
 370                      375                      380  
 Glu Asn Gly Phe Trp Val Val Gln Leu Ser Lys Gly Thr Lys Tyr Leu  
 385                      390                      395                      400  
 Ser Thr Phe Ser Ala Leu Thr Pro Val Met Leu Met Glu Pro Pro Ser  
 405                      410                      415  
 His Met Gly Ile Phe Leu Asp Phe Glu Ala Gly Glu Val Ser Phe Tyr  
 420                      425                      430  
 Ser Val Ser Asp Gly Ser His Leu His Thr Tyr Ser Gln Ala Thr Phe  
 435                      440                      445  
 Pro Gly Pro Leu Gln Pro Phe Phe Cys Leu Gly Ala Pro Lys Ser Gly  
 450                      455                      460  
 Gln Met Val Ile Ser Thr Val Thr Met Trp Val Lys Gly  
 465                      470                      475

&lt;210&gt; 5367

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5367

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 180  
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 300  
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 420  
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 gccccacc  
 549

&lt;210&gt; 5368

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5368

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Met Leu Pro Pro Lys Pro Pro Thr Phe Gly Glu Phe Leu Ser Gln His
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Lys Ala Glu Ala Ser Ser Arg Arg Arg Arg Lys Ser Ser Arg Pro Gln
      20           25           30
Ala Lys Ala Ala Pro Arg Ala Tyr Ser Asp His Asp Asp Arg Trp Glu
      35           40           45
Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr
      50           55           60
Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile
65           70           75           80
Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu
      85           90           95
Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu
      100          105          110
Glu Glu Ile Glu Val Glu Glu Gly Asp Glu Glu Glu Pro Ala Gln Asp
      115          120          125
His Gln Ala Pro Glu Ala Ala Pro Thr
      130          135

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&lt;210&gt; 5369

&lt;211&gt; 646

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5369

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120
cagcagcagc agctcctgca gccgcggccc tcgcccgtgg gcagcagcgg gcccgagccc
180
cccgggggggc agcccgcagg catgaaggac ctggacgcca tcaaactctt cgtgggcccag
240
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300
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360
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540
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&lt;210&gt; 5370

<211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 5370  
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 His Leu Asp Glu Lys Asp Leu Lys Pro Leu Phe Glu Gln Phe Gly Arg  
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 Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys  
 35 40 45  
 Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro  
 50 55 60  
 Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala  
 65 70 75 80  
 His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro  
 85 90 95  
 Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg  
 100 105 110  
 Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Leu Pro Pro Ser Pro  
 115 120 125  
 Pro Ser Gly Ile Ser Ser Leu Ser Pro Ser Leu Ser Pro Ser Leu Ser  
 130 135 140  
 Pro Phe Leu Phe  
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<210> 5371  
 <211> 1177  
 <212> DNA  
 <213> Homo sapiens

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 120  
 tccacgccgt ccactgtcct cagcgaccag gccaagtatc taaaccctt actgggagag  
 180  
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<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

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Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
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Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
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Asn Arg Gly Ser Arg Thr Gly Tyr Val His Ile Tyr Asp Val Glu Lys						
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Asp Cys Trp Glu Glu Gly Pro Gln Leu Asp Asn Ser Ile Ser Gly Leu						
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Ala Ala Cys Val Leu Thr Leu Pro Arg Ser Leu Leu Leu Glu Pro Pro						
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&lt;210&gt; 5373

&lt;211&gt; 4221

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5373

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<210> 5374

<211> 886

<212> PRT

<213> Homo sapiens

<400> 5374

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		20						25					30		
Lys	Lys	Ser	Leu	Gln	Glu	Lys	Gly	Lys	Leu	Ser	Ala	Glu	Glu	Asn	Pro
		35					40					45			
Asp	Asp	Ser	Glu	Val	Pro	Ser	Ser	Ser	Gly	Ile	Asn	Ser	Thr	Lys	Ser
	50					55					60				
Gln	Asp	Lys	Asp	Val	Asn	Glu	Gly	Glu	Thr	Ser	Asp	Gly	Val	Arg	Lys
65					70					75				80	
Ser	Val	His	Lys	Val	Phe	Ala	Ser	Met	Leu	Gly	Glu	Asn	Glu	Asp	Asp
			85						90					95	
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Thr
			100					105					110		
Pro	Glu	Gln	Pro	Thr	Ala	Gly	Asp	Val	Phe	Val	Leu	Glu	Met	Val	Leu
		115					120						125		
Asn	Arg	Glu	Thr	Lys	Lys	Met	Met	Lys	Glu	Lys	Arg	Pro	Arg	Ser	Lys
		130				135					140				
Leu	Pro	Arg	Ala	Leu	Arg	Gly	Leu	Met	Gly	Glu	Ala	Asn	Ile	Arg	Phe
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Ala	Arg	Gly	Glu	Arg	Glu	Glu	Ala	Ile	Leu	Met	Cys	Met	Glu	Ile	Ile
			165					170						175	
Arg	Gln	Ala	Pro	Leu	Ala	Tyr	Glu	Pro	Phe	Ser	Thr	Leu	Ala	Met	Ile
		180						185					190		
Tyr	Glu	Asp	Gln	Gly	Asp	Met	Glu	Lys	Ser	Leu	Gln	Phe	Glu	Leu	Ile
		195					200					205			
Ala	Ala	His	Leu	Asn	Pro	Ser	Asp	Thr	Glu	Glu	Trp	Val	Arg	Leu	Ala
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Thr	Lys	Ala	Leu	Lys	Tyr	Glu	Pro	Thr	Asn	Val	Arg	Tyr	Leu	Trp	Glu
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Arg	Ser	Ser	Leu	Tyr	Glu	Gln	Met	Gly	Asp	His	Lys	Met	Ala	Met	Asp
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Gly	Tyr	Arg	Arg	Ile	Leu	Asn	Leu	Leu	Ser	Pro	Ser	Asp	Gly	Glu	Arg
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Phe	Met	Gln	Leu	Ala	Arg	Asp	Met	Ala	Lys	Ser	Tyr	Tyr	Glu	Ala	Asn
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Asp	Val	Thr	Ser	Ala	Ile	Asn	Ile	Ile	Asp	Glu	Ala	Phe	Ser	Lys	His
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Gln	Gly	Leu	Val	Ser	Met	Glu	Asp	Val	Asn	Ile	Ala	Ala	Glu	Leu	Tyr
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Ile	Ser	Asn	Lys	Gln	Tyr	Asp	Lys	Ala	Leu	Glu	Ile	Ile	Thr	Asp	Phe

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          355          360          365
Glu Asn Lys Ala Pro Glu Asn Val Thr Cys Thr Ile Pro Asp Gly Val
          370          375          380
Pro Ile Asp Ile Thr Val Lys Leu Met Val Cys Leu Val His Leu Asn
385          390          395          400
Ile Leu Glu Pro Leu Asn Pro Leu Leu Thr Thr Leu Val Glu Gln Asn
          405          410          415
Pro Glu Asp Met Gly Asp Leu Tyr Leu Asp Val Ala Glu Ala Phe Leu
          420          425          430
Asp Val Gly Glu Tyr Asn Ser Ala Leu Pro Leu Leu Ser Ala Leu Val
          435          440          445
Cys Ser Glu Arg Tyr Asn Leu Ala Val Val Trp Leu Arg His Ala Glu
          450          455          460
Cys Leu Lys Ala Leu Gly Tyr Met Glu Arg Ala Ala Glu Ser Tyr Gly
465          470          475          480
Lys Val Val Asp Leu Ala Pro Leu His Leu Asp Ala Arg Ile Ser Leu
          485          490          495
Ser Thr Leu Gln Gln Gln Leu Gly Gln Pro Glu Lys Ala Leu Glu Ala
          500          505          510
Leu Glu Pro Met Tyr Asp Pro Asp Thr Leu Ala Gln Asp Ala Asn Ala
          515          520          525
Ala Gln Gln Glu Leu Lys Leu Leu Leu His Arg Ser Thr Leu Leu Phe
          530          535          540
Ser Gln Gly Lys Met Tyr Gly Tyr Val Asp Thr Leu Leu Thr Met Leu
545          550          555          560
Ala Met Leu Leu Lys Val Ala Met Asn Arg Ala Gln Val Cys Leu Ile
          565          570          575
Ser Ser Ser Lys Ser Gly Glu Arg His Leu Tyr Leu Ile Lys Val Ser
          580          585          590
Arg Asp Lys Ile Ser Asp Ser Asn Asp Gln Glu Ser Ala Asn Cys Asp
          595          600          605
Ala Lys Ala Ile Phe Ala Val Leu Thr Ser Val Leu Thr Lys Asp Asp
          610          615          620
Trp Trp Asn Leu Leu Leu Lys Ala Ile Tyr Ser Leu Cys Asp Leu Ser
625          630          635          640
Arg Phe Gln Glu Ala Glu Leu Leu Val Asp Ser Ser Leu Glu Tyr Tyr
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Ser Phe Tyr Asp Asp Arg Gln Lys Arg Lys Glu Leu Glu Tyr Phe Gly
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Leu Ser Ala Ala Ile Leu Asp Lys Asn Phe Arg Lys Ala Tyr Asn Tyr
          675          680          685
Ile Arg Ile Met Val Met Glu Asn Val Asn Lys Pro Gln Leu Trp Asn
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Ile Phe Asn Gln Val Thr Met His Ser Gln Asp Val Arg His His Arg
705          710          715          720
Phe Cys Leu Arg Leu Met Leu Lys Asn Pro Glu Asn His Ala Leu Cys
          725          730          735
Val Leu Asn Gly His Asn Ala Phe Val Ser Gly Ser Phe Lys His Ala
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Leu Gly Gln Tyr Val Gln Ala Phe Arg Thr His Pro Asp Glu Pro Leu
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Tyr Ser Phe Cys Ile Gly Leu Thr Phe Ile His Met Ala Ser Gln Lys

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Asn Arg Tyr Leu Ser Leu Arg Gly Pro Cys Gln Glu Ser Phe Tyr Asn
      805              810              815
Leu Gly Arg Gly Leu His Gln Leu Gly Leu Ile His Leu Ala Ile His
      820              825              830
Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile
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Glu Leu Asp Gln Leu Asp Leu Arg Arg Asp Ile Ala Tyr Asn Leu Ser
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 <213> Homo sapiens

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<210> 5376  
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 <213> Homo sapiens

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Leu Gln Arg Ala Ala Ala Ser Ser Glu Ser Pro Val Ala Arg Thr Trp
35          40          45
Val Gln Leu Lys Ser Ile Ser Leu Phe Ala Phe Ser Glu Ala Ser Pro

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65		70		75
Cys His Arg Pro Arg Thr Ile Ser Ile Phe Asn Pro Arg Asn His Thr				
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Gly Asp Gly Trp Gly Met Phe Met Ser Pro Phe Tyr Arg Ser Gly Asp				
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&lt;210&gt; 5377

&lt;211&gt; 1452

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5377

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&lt;210&gt; 5380

&lt;211&gt; 903

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5380

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&lt;210&gt; 5382

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5382

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&lt;211&gt; 2027

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&lt;210&gt; 5384

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5384

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Pro	Asn	Glu	Arg	His	Ser	Ile	Arg	Cys	Pro	Glu	Ser	Gly	Glu	His	Tyr

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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5390

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5390

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5391

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&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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&lt;210&gt; 5394

&lt;211&gt; 354

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5394

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&lt;210&gt; 5395

&lt;211&gt; 3711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5395

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&lt;210&gt; 5396

&lt;211&gt; 760

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5396

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Lys	Lys Leu Arg Arg Ser Ser Ser Leu Lys Glu Arg Ser Arg Pro Phe				
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Val	Ser Pro Pro Ile Arg Lys Gly Trp Ser Met Ser Glu Gln Ser Glu				
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Lys	Ala Ser Lys Lys Asn Gly Asn Val Gly Lys Thr Thr Trp Gln Asn				
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Lys	Glu Ser Lys Gly Glu Thr Gly Lys Arg Ser Lys Glu Gly His Ser				
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Glu	Asp Asp Asn Ser Phe Leu Lys Gln Gln Ser Pro Gln Glu Pro Lys				
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Ser	Leu Asn Trp Ser Ser Phe Val Asp Asn Thr Phe Ala Glu Glu Phe				
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Thr	Thr Gln Asn Gln Lys Ser Gln Asp Val Glu Leu Trp Glu Gly Glu				
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&lt;210&gt; 5397

&lt;211&gt; 561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5397

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<212> PRT

<213> Homo sapiens

<400> 5400

Xaa	Ala	Ala	Gln	Gln	Arg	Ser	His	Pro	Ala	Met	Ser	Pro	Gly	Thr	Pro
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Gly	Pro	Thr	Met	Gly	Arg	Ser	Gln	Gly	Ser	Pro	Met	Asp	Pro	Met	Val
		20						25				30			
Met	Lys	Arg	Pro	Gln	Leu	Tyr	Gly	Met	Gly	Ser	Asn	Pro	His	Ser	Gln
		35					40				45				
Pro	Gln	Gln	Ser	Ser	Pro	Tyr	Pro	Gly	Gly	Ser	Tyr	Gly	Pro	Pro	Gly
	50					55					60				
Pro	Gln	Arg	Tyr	Pro	Ile	Gly	Ile	Gln	Gly	Arg	Thr	Pro	Gly	Ala	Met
65					70					75				80	
Ala	Gly	Met	Gln	Tyr	Pro	Gln	Gln	Gln	Met	Pro	Pro	Gln	Tyr	Gly	Gln
			85						90					95	
Gln	Gly	Val	Ser	Gly	Tyr	Cys	Gln	Gln	Gly	Gln	Gln	Pro	Tyr	Tyr	Ser
		100							105				110		
Gln	Gln	Pro	Gln	Pro	Pro	His	Leu	Pro	Pro	Gln	Ala	Gln	Tyr	Leu	Pro
		115					120						125		
Ser	Gln	Ser	Gln	Gln	Arg	Tyr	Gln	Pro	Gln	Gln	Asp	Met	Ser	Gln	Glu
		130				135					140				
Gly	Tyr	Gly	Thr	Arg	Ser	Gln	Pro	Pro	Leu	Ala	Pro	Gly	Lys	Pro	Asn
145					150					155				160	
His	Glu	Asp	Leu	Asn	Leu	Ile	Gln	Gln	Glu	Arg	Pro	Ser	Ser	Leu	Pro
			165						170					175	
Val	Arg	His	Tyr	Cys	Ala	Asp	Leu	Glu	Met						
			180					185							

<210> 5401

<211> 2674

<212> DNA

<213> Homo sapiens

<400> 5401

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120  
atttcagaaa gtatggatat actcttcaga ataagaggag gccttgattt ggcttttcag  
180  
ctagctactc ctaatgaaat ttttctcaag aaggcactga aacatgtgtt gagtgacctg  
240  
tcaactaagc tgtcttcaaa cgcccttggtg ttcagaattt gccacagttc agtgtatata  
300  
tggcctagca gtgacataaa caccattcct ggagaactga ctgatgcttc tgcttgtaag  
360  
aacatactgc gctttattca atttgagcca gaagaagata taaaaagaaa attcatgaga  
420  
aagaaggaca aaaagttatc agacatgcat caaatagtaa atatagatct tatgtctggaa  
480  
atgtcaacct ccttggcagc tgtaacgccc atcattgaaa gggaaagcgg aggacaccat  
540  
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600  
ggaaaagttc gtaagctcct ggttgatgca attcataatc aactaactga catggaaaaa  
660  
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720  
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780  
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840  
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900  
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1440  
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1560  
tataaatttg tgaataaaga atcagtttaa tttttcacat taaatcctgg ttctagtttg  
1620  
accatttaaa ttatgacctt tttcaaaggt tgtaaatact gcacggagaa tgtattttta  
1680

gacgttcctt taataactta aaagacaaag catacacaaac cagcatatta taggcatgta  
 1740  
 aatacatgtg ttcttaaagt gatcttcact tggaagaaag tttttcgtcc ttctcagaag  
 1800  
 gagattagac acaacatatg gttaaagccaa aagcaggagc ttatagattt gcatgaaatg  
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 aaggcgttct tcagacttct tcataaccca cgtgacatct gtttttaaaa acacgttaac  
 1920  
 attaaaaact tttttttaaa aagagtttta tccccaaact tccaccatgc agtcccattt  
 1980  
 ttggtctcta gactctggta agtataacca gtactaaaat gttaatgaga atgaaacaat  
 2040  
 actactagaa atacgagtgt cagtattaaa tggaataata aatgctatgc aaacaagaga  
 2100  
 tcaactgctgg aggaaaaaag cagcagctct gagttactta ccagcacttc cttttccac  
 2160  
 tgggtatttc tacacttccg agactccgtt tctgtctgag cacggcaaca caatcattcc  
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 2280  
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 2340  
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 2400  
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 2460  
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 2520  
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 2580  
 gtgtatgagt acccaaaggt agtcaatggg aactatagaa tgggttttcc tgaaccgaaa  
 2640  
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 2674

&lt;210&gt; 5402

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5402

Xaa	Leu	Ser	Lys	Glu	Gly	Ala	Pro	Ala	Leu	Gly	Pro	Trp	Val	Thr	Pro
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Phe	Lys	Ala	Arg	Pro	Arg	Glu	Phe	Trp	Ala	Arg	Cys	Lys	Arg	Pro	Cys
			20					25					30		
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
		35					40					45			
Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
	50					55					60				
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
65					70					75				80	
Ser	Thr	Lys	Leu	Ser	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser
			85					90					95		
Ser	Val	Tyr	Ile	Trp	Pro	Ser	Ser	Asp	Ile	Asn	Thr	Ile	Pro	Gly	Glu

100 105 110  
 Leu Thr Asp Ala Ser Ala Cys Lys Asn Ile Leu Arg Phe Ile Gln Phe  
 115 120 125  
 Glu Pro Glu Glu Asp Ile Lys Arg Lys Phe Met Arg Lys Lys Asp Lys  
 130 135 140  
 Lys Leu Ser Asp Met His Gln Ile Val Asn Ile Asp Leu Met Leu Glu  
 145 150 155 160  
 Met Ser Thr Ser Leu Ala Ala Val Thr Pro Ile Ile Glu Arg Glu Ser  
 165 170 175  
 Gly Gly His His Tyr Val Asn Met Thr Leu Pro Val Asp Ala Val Ile  
 180 185 190  
 Ser Val Ala Pro Glu Glu Thr Trp Gly Lys Val Arg Lys Leu Leu Val  
 195 200 205  
 Asp Ala Ile His Asn Gln Leu Thr Asp Met Glu Lys Cys Ile Leu Lys  
 210 215 220  
 Tyr Met Lys Arg Thr Ser Ile Val Val Pro Glu Pro Leu His Phe Leu  
 225 230 235 240  
 Leu Pro Gly Lys Lys Asn Leu Val Thr Ile Ser Tyr Pro Ser Gly Ile  
 245 250 255  
 Pro Asp Gly Gln Leu Gln Ala Tyr Arg Lys Glu Leu His Asp Leu Phe  
 260 265 270  
 Asn Leu Pro His Asp Arg Pro Tyr Phe Lys Arg Ser Asn Ala Tyr His  
 275 280 285  
 Phe Pro Asp Glu Pro Tyr Lys Asp Gly Tyr Ile Arg Asn Pro His Thr  
 290 295 300  
 Tyr Leu Asn Pro Pro Asn Met Glu Thr Gly Met Ile Tyr Val Val Gln  
 305 310 315 320  
 Gly Ile Tyr Gly Tyr His His Tyr Met Gln Asp Arg Ile Asp Asp Asn  
 325 330 335  
 Gly Trp Gly Cys Ala Tyr Arg Ser Leu Gln Thr Ile Cys Ser Trp Phe  
 340 345 350  
 Lys His Gln Gly Tyr Thr Glu Arg Ser Ile Pro Thr His Arg Glu Ile  
 355 360 365  
 Gln Gln Ala Leu Val Asp Ala Gly Asp Lys Pro Ala Thr Phe Val Gly  
 370 375 380  
 Ser Arg Gln Trp Ile Gly Ser Ile Glu Val Gln Leu Val Leu Asn Gln  
 385 390 395 400  
 Leu Ile Gly Ile Thr Ser Lys Ile Leu Phe Val Ser Gln Gly Ser Glu  
 405 410 415  
 Ile Ala Ser Gln Gly Arg Glu Leu Ala Asn His Phe Gln Ser Glu Gly  
 420 425 430  
 Thr Pro Val Met Ile Gly Gly Gly Val Leu Ala His Thr Ile Leu Gly  
 435 440 445  
 Val Ala Trp Asn Glu Ile Thr Gly Gln Ile Lys Phe Leu Ile Leu Asp  
 450 455 460  
 Pro His Tyr Thr Gly Ala Glu Asp Leu Gln Val Ile Leu Glu Lys Gly  
 465 470 475 480  
 Trp Cys Gly Trp Lys Gly Pro Asp Phe Trp Asn Lys Asp Ala Tyr Tyr  
 485 490 495  
 Asn Leu Cys Leu Pro Gln Arg Pro Asn Met Ile  
 500 505

&lt;210&gt; 5403

&lt;211&gt; 451

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5403

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cacgcgctag ttcgcgctgc tggatcaggc tcaggatctc cagcactgac aatggctcct  
120  
tcattcttgg gggctctggg accttgggtg ggggctctgg agctgcctcg cctgcaggca  
180  
ccactctctc agccagggac gcacgctggg gctntggatc cagcctccag tctcaggaag  
240  
gccagtctcc gggcggcctc ccccgctgcc tcctcgctgc cgtgggctcg ggtcccatgc  
300  
agccggggcca ggaggccaaa atctgctgag ctctcgcgta tccctggtac cagcacacgg  
360  
cccaagaaag agcggggctg cccatcccca gggctgctg ccgcccggccc gggggccagc  
420  
ccagccggaa gggggccagg cccgcaagct t  
451

&lt;210&gt; 5404

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5404

Ala	Pro	Ser	Pro	Ser	Thr	Ala	Pro	Ala	Pro	Arg	Pro	Leu	Ala	Pro	Gly
1				5					10				15		
Cys	Ala	Arg	Pro	His	Ala	Leu	Val	Arg	Ala	Ala	Gly	Ser	Gly	Ser	Gly
			20					25				30			
Ser	Pro	Ala	Leu	Thr	Met	Ala	Pro	Ser	Ser	Leu	Gly	Ala	Leu	Gly	Pro
		35				40					45				
Trp	Val	Gly	Ala	Leu	Glu	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Leu	Ser	Gln
	50				55					60					
Pro	Gly	Thr	His	Ala	Gly	Ala	Xaa	Asp	Pro	Arg	Pro	Ser	Leu	Arg	Lys
65				70				75					80		
Ala	Ser	Leu	Arg	Ala	Ala	Ser	Pro	Ala	Ala	Ser	Ser	Ser	Pro	Trp	Ala
			85					90					95		
Arg	Val	Pro	Cys	Ser	Arg	Ala	Arg	Arg	Pro	Lys	Ser	Ala	Glu	Leu	Leu
		100						105					110		
Arg	Ile	Pro	Gly	Thr	Ser	Thr	Arg	Pro	Lys	Lys	Glu	Arg	Gly	Cys	Pro
	115					120						125			
Ser	Pro	Gly	Leu	Pro	Ala	Ala	Gly	Pro	Gly	Pro	Ser	Pro	Ala	Gly	Arg
	130					135					140				
Gly	Pro	Gly	Pro	Gln	Ala										
145					150										

&lt;210&gt; 5405

&lt;211&gt; 1609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5405

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cctggatttc ttaatatgaa gataaagttt gtgtgcgccc agtgtctgag aaacgggtcaa  
120  
gtcattgaac cagacaaaaa cagaaaatat tgtagtgcaa aagcaaggca ttcgtggacc  
180  
aaagaccggc gtgcgatgag agtgatgtct attgaacgta agaagtggat gaacatccgt  
240  
cctctcccca caaagaaaca aatgccttta cagtttgatc tgtgcaacca tattgcttct  
300  
gggaaaaaat gtcaatatgt gggaaactgt tcctttgctc atagtcctga ggaaagagaa  
360  
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420  
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480  
ggaaaacaaa ttcacatgcc aacagattat gctgaagtta cagtggactt tcaactgctgg  
540  
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600  
caciaagaga aggttttcca caccgaggac gaccagtact gctggcagca ccgcttccca  
660  
acaggctatt tcagtatttg tgataggtat atgaatggca cctgcccaga aggaaacagc  
720  
tgtaaatttg cacatggaaa tgccgaactt catgaatggg aagaaagaag agatgcccta  
780  
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840  
ggaaaatata gttttttgtt taaagattta aactaatatg ctggctttta tgtatgatac  
900  
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960  
cagatttcct gcttgtattg gcgtatatcg ttcctcctga gcagcaaccc acagtaggta  
1020  
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1080  
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1140  
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1200  
gacggtaaga gaataaacac ttgtactggg atcagaatac atgatggatg aaattcttta  
1260  
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1380  
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1500  
gctgtttaaa tgatgatttt gaaagattaa acctgtactg ttggtattgt gttagtgtat  
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1609

<210> 5406  
 <211> 291  
 <212> PRT  
 <213> Homo sapiens

<400> 5406  
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 20 25 30  
 Ala Gln Cys Leu Arg Asn Gly Gln Val Ile Glu Pro Asp Lys Asn Arg  
 35 40 45  
 Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg  
 50 55 60  
 Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg  
 65 70 75 80  
 Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn  
 85 90 95  
 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe  
 100 105 110  
 Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn  
 115 120 125  
 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln  
 130 135 140  
 Lys Asn Glu Lys Ser Glu Asp Ile Ala Ser Gln Ser Asn Lys Glu Asn  
 145 150 155 160  
 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp  
 165 170 175  
 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp  
 180 185 190  
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr  
 195 200 205  
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe  
 210 215 220  
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser  
 225 230 235 240  
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg  
 245 250 255  
 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu  
 260 265 270  
 Ile Gly Pro Asn Asp Asn Asp Phe Gly Lys Tyr Ser Phe Leu Phe Lys  
 275 280 285  
 Asp Leu Asn  
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<210> 5407  
 <211> 2010  
 <212> DNA  
 <213> Homo sapiens

<400> 5407  
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120  
gagatggtgt tatctgaaaa ggtagtcag ctgatggaat ggactaaca aagacctgta  
180  
ataagaatga atggagacaa gttccgtcgc cttgtgaaag cccaccgag aaattactcc  
240  
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420  
aattcagctc caactttcat caactttcct gcaaaaggga aacccaaacg gggatgata  
480  
tatgagttac aggtgcgggg tttttcagct gagcagattg cccggtggat cgccgacaga  
540  
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720  
caaattgtga accatataag aggaccacca tatgcccata agaatcccca cacgggacat  
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960  
ttcagttgga tgctctctat ttttagatct aaatatcatg gctaccata cagctttctg  
1020  
atgagttaaa aaggtcccag agatatatag aactggagt actggaaatt gaaaaacgaa  
1080  
aatcgtgtgt gtttgaaaag aagaatgcaa cttgtatatt ttgtattacc tcttttttc  
1140  
aagtgattta aatagttaat catttaacca aagaagatgt gtagtgcctt aacaagcaat  
1200  
cctctgtcaa aatctgaggt atttgaaaat aattatcctc ttaaccttct cttcccagt  
1260  
aactttatgg aacatttaat ttagtacaat taagtatatt ataaagatac tatgactgcc  
1320  
acctgccatt taccttctaa taacctgcc atgtgggttg cagaaagaga tggatatagt  
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1440  
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1500  
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1560  
tctatgctgt ggttcttatg agacttgat gaagatgccc tgatttgta agattgacca  
1620  
cgggaatact actgccatgt aatctgtata gttccagata atttgtcatg aacattgaca  
1680

gaatgacaat tttttgtatt tgctttttct ccctttaaga gcacattctt ctgtaaggag  
 1740  
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 1800  
 gacttttgtg aaaattttga attagctttc atatgaagtg ccttaagtag actcttcatt  
 1860  
 tacttttctg gtaatggtt aaatatcatt tgttatgcat ttttaagata cagttcagaa  
 1920  
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 1980  
 ataaactttt acaatctaaa aaaaaaaaaa  
 2010

<210> 5408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 5408

Met	Ala	Ala	Arg	Trp	Arg	Phe	Trp	Cys	Val	Ser	Val	Thr	Met	Val	Val
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Ala	Leu	Leu	Ile	Val	Cys	Asp	Val	Pro	Ser	Ala	Ser	Ala	Gln	Arg	Lys
		20					25						30		
Lys	Glu	Met	Val	Leu	Ser	Glu	Lys	Val	Ser	Gln	Leu	Met	Glu	Trp	Thr
	35					40					45				
Asn	Lys	Arg	Pro	Val	Ile	Arg	Met	Asn	Gly	Asp	Lys	Phe	Arg	Arg	Leu
50					55					60					
Val	Lys	Ala	Pro	Pro	Arg	Asn	Tyr	Ser	Val	Ile	Val	Met	Phe	Thr	Ala
65					70					75				80	
Leu	Gln	Leu	His	Arg	Gln	Cys	Val	Val	Cys	Lys	Gln	Ala	Asp	Glu	Glu
			85						90				95		
Phe	Gln	Ile	Leu	Ala	Asn	Ser	Trp	Arg	Tyr	Ser	Ser	Ala	Phe	Thr	Asn
			100					105					110		
Arg	Ile	Phe	Phe	Ala	Met	Val	Asp	Phe	Asp	Glu	Gly	Ser	Asp	Val	Phe
		115					120					125			
Gln	Met	Leu	Asn	Met	Asn	Ser	Ala	Pro	Thr	Phe	Ile	Asn	Phe	Pro	Ala
	130					135					140				
Lys	Gly	Lys	Pro	Lys	Arg	Gly	Asp	Thr	Tyr	Glu	Leu	Gln	Val	Arg	Gly
145					150					155				160	
Phe	Ser	Ala	Glu	Gln	Ile	Ala	Arg	Trp	Ile	Ala	Asp	Arg	Thr	Asp	Val
			165					170					175		
Asn	Ile	Arg	Val	Ile	Arg	Pro	Pro	Asn	Tyr	Ala	Gly	Pro	Leu	Met	Leu
			180					185					190		
Gly	Leu	Leu	Leu	Ala	Val	Ile	Gly	Gly	Leu	Val	Tyr	Leu	Arg	Arg	Ser
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Ile	His	Gly	Ser	Ser	Gln	Ala	Gln	Phe	Val	Ala	Glu	Thr	His	Ile	Val
			260					265					270		
Leu	Leu	Phe	Asn	Gly	Gly	Val	Thr	Leu	Gly	Met	Val	Leu	Leu	Cys	Glu



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Ala	Ala Thr Ser Asp Met	Asp Ile Gly Lys Arg	Lys Ile Met Cys Val			
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&lt;210&gt; 5409

&lt;211&gt; 2019

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5409

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<211> 198

<212> PRT

<213> Homo sapiens

<400> 5410

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Ser	Ser	Phe	Ser	Asp	Arg	Lys	Phe	Ser	Val	Thr	Ser	Arg	Gly	Ser	Ile

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Pro	Leu	Leu	Ala	Glu	Leu	Pro	Phe	Pro	Ser	Val	Leu	Glu	Ser	Glu	Glu
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&lt;210&gt; 5411

&lt;211&gt; 2802

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5411

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 <213> Homo sapiens

<400> 5412

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      35           40           45
Asp Leu Cys Val Leu Phe Gly Lys Gly Asn Ser Pro Leu Leu Gln Lys
      50           55           60
Met Ile Gly Asn Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu
65           70           75           80
Asp Glu Thr Leu Pro Thr Ile Leu Gln Val Phe Ser Asn Ile Leu Gln
      85           90           95
His Cys Gly Leu Gln Gly Asp Gly Ala Asn Thr Thr Pro Gln Lys Leu
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Glu Glu Arg Gly Arg Leu Thr Pro Ser Asp Met Pro Leu Leu Glu Leu
      115          120          125
Lys Asp Ile Val Leu Tyr Leu Cys Asp Thr Cys Thr Thr Leu Trp Ala
      130          135          140
Phe Leu Asp Ile Phe Pro Leu Ala Cys Gln Thr Phe Gln Lys His Asp
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Phe Cys Tyr Arg Leu Ala Ser Phe Tyr Glu Ala Ala Ile Pro Glu Met
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Glu Ser Ala Ile Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly
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Asp Leu Trp Gln Arg Leu Ser His Ser Arg Lys Lys Leu Met Glu Ile
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Tyr Tyr Glu Asp Glu Tyr Asp Asp Thr Tyr Asp Gly Asn Gln Val Gly
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Pro Ser Gln Val Leu Arg Thr Lys Val Pro Arg Glu Gly Gln Glu Glu
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&lt;210&gt; 5413

&lt;211&gt; 1677

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5413

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&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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<211> 1493



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&lt;213&gt; Homo sapiens

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&lt;210&gt; 5418

&lt;211&gt; 528

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5418

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 Arg Leu Leu Lys Glu Pro Glu Lys Glu Arg Asp Ser Asp Ser Asp Phe  
 35 40 45  
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 Arg His Ala Glu Asn Pro His His Pro Leu Lys Thr Ser Ser Arg Ala

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Lys	Gly	Pro	Val	Ala	Val	Thr	Gly	Ala	Ser	Thr	Pro	Glu	Gly	Thr	Ala
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Tyr	Val	Phe	Arg	Ala	Gln	Ser	Ala	Glu	Met	Lys	Glu	Arg	Gly	Gly	Asn
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Gln	Thr	Ser	Gly	Ile	Asp	Phe	Phe	Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe
			245					250					255		
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His	Val	Val	Ile	Val	Val	Gln	Asp	Trp	Phe	Thr	Asp	Leu	Ser	Leu	Tyr
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Arg	Leu	Trp	Asp	Leu	Gly	Cys	Lys	Cys	Lys	Ser	Asn	Ser	His	Ser	Pro
			325					330					335		
Gln	Thr	Pro	Arg	Phe	Leu	Gln	Thr	Ala	Glu	Met	Val	Lys	Pro	Ser	Thr
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Pro	Ser	Pro	Ser	His	Glu	Ser	Ser	Ser	Ser	Ser	Gly	Ser	Asp	Glu	Gly
		355				360						365			
Thr	Glu	Tyr	Tyr	Pro	His	Leu	Val	Phe	Leu	Gln	Asn	Lys	Ala	Arg	Arg
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Glu	Asp	Phe	Cys	Pro	Arg	Lys	Leu	Arg	Gln	Met	His	Leu	Met	Ile	Asp
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Gln	Leu	Met	Ala	His	Ser	His	Leu	Arg	Tyr	Lys	Gly	Thr	Leu	Ser	Met
			405					410					415		
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		420						425				430			
Glu	Val	Asn	Leu	Phe	Leu	Val	Pro	Phe	Met	Asp	Ser	Glu	Ala	Glu	Ser
	435						440					445			
Glu	Asn	Pro	Pro	Arg	Ala	Gly	Pro	Gly	Ser	Ser	Pro	Leu	Phe	Ser	Leu
	450					455				460					
Leu	Pro	Gly	Tyr	Arg	Gly	His	Pro	Ser	Phe	Gln	Ser	Leu	Val	Ser	Lys
465					470					475					480
Leu	Arg	Ser	Gln	Val	Met	Ser	Met	Ala	Arg	Pro	Gln	Leu	Ser	His	Thr
			485					490					495		
Ile	Leu	Thr	Glu	Lys	Asn	Trp	Phe	His	Tyr	Ala	Ala	Arg	Ile	Trp	Asp

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 <212> DNA  
 <213> Homo sapiens

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 420  
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<210> 5420  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

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 Thr Arg Arg Tyr Tyr Arg Ser Pro Ser Arg Tyr Arg Ser Arg Ser Arg  
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 Ser Arg Ser Arg Ser Arg Gly Arg Ser Tyr Cys Gly Arg Ala Tyr Ala  
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 85 90 95  
 Glu Glu His Ser Arg Trp Arg Asp Arg Ser Arg Thr Arg Ser Arg Ser  
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 Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg Met Glu Leu Leu Glu  
 115 120 125  
 Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly Thr Thr Asn Ile Asp  
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&lt;210&gt; 5421

&lt;211&gt; 1239

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5421

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<210> 5422

<211> 276

<212> PRT

<213> Homo sapiens

<400> 5422

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			20					25					30		
Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr	Cys
			35				40					45			
Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser	Met
			50				55				60				
Gly	Asn	Trp	Ser	Met	Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Val	Thr	Leu
65					70					75					80
Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu
			85						90					95	
Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe
			100					105					110		
Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu
			115				120					125			
Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser
			130			135					140				
Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg	Ala
145					150					155					160
Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu	Leu
			165						170					175	
Lys	Val	Leu	Glu	Thr	Phe	Val	Ala	Cys	Ile	Ile	Phe	Ala	Phe	Ile	Ser
			180					185					190		
Asp	Pro	Asn	Leu	Tyr	Gln	His	Gln	Pro	Ala	Leu	Glu	Trp	Cys	Val	Ala
			195				200					205			
Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu	Asn
			210			215					220				
Leu	Gly	Glu	Cys	Thr	Asn	Val	Leu	Pro	Ile	Pro	Phe	Pro	Ser	Phe	Leu
225					230					235					240
Ser	Gly	Leu	Ala	Leu	Cys	Leu	Ser	Ser	Ser	Met	Pro	Pro	Pro	Leu	Phe
			245						250					255	
Ser	Gly	Pro	Ser	Thr	Ser	Ser	Met	Arg	Ser	Met	Ala	Ala	Ser	Leu	Gly

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<210> 5423  
<211> 2427  
<212> DNA  
<213> Homo sapiens

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<210> 5424

<211> 570

<212> PRT

<213> Homo sapiens

<400> 5424

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			20					25					30		
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
		35					40					45			
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln	Lys
		50					55				60				
Lys	Ala	Leu	Ser	Lys	Thr	Ser	Lys	Val	Arg	Pro	Ser	Thr	Gly	Asn	Ser

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Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val	Lys
				85					90					95	
Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp	Ala
			100					105					110		
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys	Ile
		115					120					125			
Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg	Pro
	130					135					140				
Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala	Leu
	145				150					155					160
Asp	Ala	Ile	Leu	Gly	Leu	Leu	Ser	Leu	Ser	Val	Lys	Gly	Ala	Glu	Val
			165						170					175	
Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp	Trp
		180						185					190		
Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp	Asn
	195					200					205				
Ser	Arg	Ala	Ile	Ser	Thr	Ile	Cys	Ser	Leu	Glu	Lys	Lys	Ser	Leu	Leu
	210					215					220				
Arg	Asp	Asn	Val	Asp	Leu	Leu	Gly	Ser	Leu	Ala	Asp	Leu	Tyr	Phe	Arg
	225				230					235					240
Ala	Gly	Asp	Asn	Lys	Asn	Ser	Val	Leu	Lys	Phe	Glu	Gln	Ala	Gln	Met
			245						250					255	
Leu	Asp	Pro	Tyr	Leu	Ile	Lys	Gly	Met	Asp	Val	Tyr	Gly	Tyr	Leu	Leu
		260						265					270		
Ala	Arg	Glu	Gly	Arg	Leu	Glu	Asp	Val	Glu	Asn	Leu	Gly	Cys	Arg	Leu
	275					280						285			
Phe	Asn	Ile	Ser	Asp	Gln	His	Ala	Glu	Pro	Trp	Val	Val	Ser	Gly	Cys
	290					295					300				
His	Ser	Phe	Tyr	Ser	Lys	Arg	Tyr	Ser	Arg	Ala	Leu	Tyr	Leu	Gly	Ala
	305				310					315					320
Lys	Ala	Ile	Gln	Leu	Asn	Ser	Asn	Ser	Val	Gln	Ala	Leu	Leu	Leu	Lys
			325						330					335	
Gly	Ala	Ala	Leu	Arg	Asn	Met	Gly	Arg	Val	Gln	Glu	Ala	Ile	Ile	His
		340						345					350		
Phe	Arg	Glu	Ala	Ile	Arg	Leu	Ala	Pro	Cys	Arg	Leu	Asp	Cys	Tyr	Glu
	355					360					365				
Gly	Leu	Ile	Glu	Cys	Tyr	Leu	Ala	Ser	Asn	Ser	Ile	Arg	Glu	Ala	Met
	370					375					380				
Val	Met	Ala	Asn	Asn	Val	Tyr	Lys	Thr	Leu	Gly	Ala	Asn	Ala	Gln	Thr
	385				390					395					400
Leu	Thr	Leu	Leu	Ala	Thr	Val	Cys	Leu	Glu	Asp	Pro	Val	Thr	Gln	Glu
			405						410					415	
Lys	Ala	Lys	Thr	Leu	Leu	Asp	Lys	Ala	Leu	Thr	Gln	Arg	Pro	Asp	Tyr
		420						425					430		
Ile	Lys	Ala	Val	Val	Lys	Lys	Ala	Glu	Leu	Leu	Ser	Arg	Glu	Gln	Lys
		435					440					445			
Tyr	Glu	Asp	Gly	Ile	Ala	Leu	Leu	Arg	Asn	Ala	Leu	Ala	Asn	Gln	Ser
	450					455					460				
Asp	Cys	Val	Leu	His	Arg	Ile	Leu	Gly	Asp	Phe	Leu	Val	Ala	Val	Asn
	465				470					475					480
Glu	Tyr	Gln	Glu	Ala	Met	Asp	Gln	Tyr	Ser	Ile	Ala	Leu	Ser	Leu	Asp
			485						490					495	
Pro	Asn	Asp	Gln	Lys	Ser	Leu	Glu	Gly	Met	Gln	Lys	Met	Glu	Lys	Glu

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<210> 5425
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<212> DNA
<213> Homo sapiens
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<210> 5426
<211> 98
<212> PRT
<213> Homo sapiens
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4609

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Glu Leu

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<210> 5427
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<212> DNA
<213> Homo sapiens
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tgaggataca tcagagggca aaatggatac agatactctg aaaaaacgtg cattctagct
180
gggattgggt cctccacact gtgtccaaaa ggtatgttgg ggttgctgaa gtagataaac
240
tggtattggc agcaggaaca gcatttatgg aacagagggg aagacacatt caaggaatga
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360
gttgaa
366

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<210> 5428
<211> 101
<212> PRT
<213> Homo sapiens
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<400> 5428
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Ser Cys Cys Gln Tyr Gln Phe Ile Tyr Phe Ser Asn Pro Asn Ile Pro
          20          25          30
Phe Gly His Ser Val Glu Asp Pro Ile Pro Ala Arg Met His Val Phe
          35          40          45
Ser Glu Tyr Leu Tyr Pro Phe Cys Pro Leu Met Tyr Pro Gln His Leu
          50          55          60
Glu Glu His Leu Ala Cys Ser Arg Tyr Ser Thr Arg Ile Phe Asp Leu
65          70          75          80
Phe Val Gly Leu Phe Met Thr Glu Ser Cys Ser Val Ala Gln Thr Gly
          85          90          95
Val Gln Tyr Ser Asp
          100

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<210> 5429
<211> 612
<212> DNA
<213> Homo sapiens
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<400> 5429

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 120  
 gcgctgagct gggggaggcc cggggctccc gcccagcct cgaagccccg cccaggctg  
 180  
 gatttgaatt gcttgtggct cgcgccacag cccattttcc tctggaagct gagacccgc  
 240  
 cccgtgccag ctgccacgcc cctgacaggt cctctgccac tctaagtcca ggccccgccc  
 300  
 accgcacaat gccagctctg cccactctaa ggtcccgcgc acttccactc cttgggggag  
 360  
 gcaccctccc cttggtcctg tgggcccgtt ctccagcaga aaaccacgcc caccaagcag  
 420  
 aggccacgcc cacaaccgaa gtcaacgcca accctgtact caaacctcgg cccatagttc  
 480  
 ctcagatccc ctcaccctg gccagggatc cctctaacc accgtgtccc gactgctgac  
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<210> 5430

<211> 94

<212> PRT

<213> Homo sapiens

<400> 5430

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Val	Lys	Gln	Glu	Arg	Gly	Glu	Gly	Pro	Arg	Ala	Gly	Glu	Lys	Gly	Ser
		20					25					30			
His	Glu	Glu	Glu	Val	Arg	Val	Pro	Ala	Leu	Ser	Trp	Gly	Arg	Pro	Arg
		35				40					45				
Ala	Pro	Ala	Pro	Ala	Ser	Lys	Pro	Arg	Pro	Arg	Leu	Asp	Leu	Asn	Cys
	50					55					60				
Leu	Trp	Leu	Arg	Pro	Gln	Pro	Ile	Phe	Leu	Trp	Lys	Leu	Arg	Pro	Arg
65				70					75				80		
Pro	Val	Pro	Ala	Ala	Thr	Pro	Leu	Thr	Gly	Pro	Leu	Pro	Leu		
				85					90						

<210> 5431

<211> 3005

<212> DNA

<213> Homo sapiens

<400> 5431

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 120  
 gccattgtct gggcacccaa cctgctacgg tccatggagc tggagtcagt gggaatgggt  
 180

ggcgcgggcgg cgttccggga agttcgggtg cagtcgggtg tggaggagtt tctgctcacc  
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300  
tgctgtctcc ccaggcccaa gtcccttgcg ggcagctgcc cctccacccg cctgctgacg  
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720  
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900  
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960  
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1020  
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1080  
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1140  
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gctctcagcc ccggccggag cctgcgcccc catctcatac ccctgctgct gcgaggagcc  
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1800

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 1980  
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 2040  
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 2280  
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 2340  
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&lt;210&gt; 5432

&lt;211&gt; 863

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5432

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Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser	Ala	Asn
			20					25					30		
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

	35					40					45						
Leu	Arg	Ser	Met	Glu	Leu	Glu	Ser	Val	Gly	Met	Gly	Gly	Ala	Ala	Ala		
	50					55					60						
Phe	Arg	Glu	Val	Arg	Val	Gln	Ser	Val	Val	Val	Glu	Phe	Leu	Leu	Thr		
65					70					75					80		
His	Val	Asp	Val	Leu	Phe	Ser	Asp	Thr	Phe	Thr	Ser	Ala	Gly	Leu	Asp		
				85					90					95			
Pro	Ala	Gly	Arg	Cys	Leu	Leu	Pro	Arg	Pro	Lys	Ser	Leu	Ala	Gly	Ser		
			100					105					110				
Cys	Pro	Ser	Thr	Arg	Leu	Leu	Thr	Leu	Glu	Glu	Ala	Gln	Ala	Arg	Thr		
			115				120					125					
Gln	Gly	Arg	Leu	Gly	Thr	Pro	Thr	Glu	Pro	Thr	Thr	Pro	Lys	Ala	Pro		
	130					135					140						
Ala	Ser	Pro	Ala	Glu	Arg	Arg	Lys	Gly	Glu	Arg	Gly	Glu	Lys	Gln	Arg		
145					150					155					160		
Lys	Pro	Gly	Gly	Ser	Ser	Trp	Lys	Thr	Phe	Phe	Ala	Leu	Gly	Arg	Gly		
				165					170					175			
Pro	Ser	Val	Pro	Arg	Lys	Lys	Pro	Leu	Pro	Trp	Leu	Gly	Gly	Thr	Arg		
			180					185					190				
Ala	Pro	Pro	Gln	Pro	Ser	Gly	Ser	Arg	Pro	Asp	Thr	Val	Thr	Leu	Arg		
		195					200					205					
Ser	Ala	Lys	Ser	Glu	Glu	Ser	Leu	Ser	Ser	Gln	Ala	Ser	Gly	Ala	Gly		
	210					215					220						
Leu	Gln	Arg	Leu	His	Arg	Leu	Arg	Arg	Pro	His	Ser	Ser	Ser	Asp	Ala		
225				230						235					240		
Phe	Pro	Val	Gly	Pro	Ala	Pro	Ala	Gly	Ser	Cys	Glu	Ser	Leu	Ser	Ser		
				245					250					255			
Ser	Ser	Ser	Ser	Glu	Ser	Ser	Ser	Ser	Glu	Ser	Ser	Ser	Ser	Ser	Ser		
			260					265					270				
Glu	Ser	Ser	Ala	Ala	Gly	Leu	Gly	Ala	Leu	Ser	Gly	Ser	Pro	Ser	His		
		275					280					285					
Arg	Thr	Ser	Ala	Trp	Leu	Asp	Asp	Gly	Asp	Glu	Leu	Asp	Phe	Ser	Pro		
	290					295					300						
Pro	Arg	Cys	Leu	Glu	Gly	Leu	Arg	Gly	Leu	Asp	Phe	Asp	Pro	Leu	Thr		
305					310					315					320		
Phe	Arg	Cys	Ser	Ser	Pro	Thr	Pro	Gly	Asp	Pro	Ala	Pro	Pro	Ala	Ser		
			325						330					335			
Pro	Ala	Pro	Pro	Ala	Pro	Ala	Ser	Ala	Phe	Pro	Pro	Arg	Val	Thr	Pro		
			340					345					350				
Gln	Ala	Ile	Ser	Pro	Arg	Gly	Pro	Thr	Ser	Pro	Ala	Ser	Pro	Ala	Ala		
		355					360					365					
Leu	Asp	Ile	Ser	Glu	Pro	Leu	Ala	Val	Ser	Val	Pro	Pro	Ala	Val	Leu		
	370					375					380						



465 470 475 480  
 Ala Glu Arg Ala Gln Gln Val Ala Glu Gln Gln Ser Gln Gln Glu Cys  
 485 490 495  
 Gly Gly Thr Pro Pro Ala Ser Gln Ser Pro Phe His Arg Ser Leu Ser  
 500 505 510  
 Leu Glu Val Gly Gly Glu Pro Leu Gly Thr Ser Gly Ser Gly Pro Pro  
 515 520 525  
 Pro Asn Ser Leu Ala His Pro Gly Ala Trp Val Pro Gly Pro Pro Pro  
 530 535 540  
 Tyr Leu Pro Arg Gln Gln Ser Asp Gly Ser Leu Leu Arg Ser Gln Arg  
 545 550 555 560  
 Pro Met Gly Thr Ser Arg Arg Gly Leu Arg Gly Pro Ala Gln Val Ser  
 565 570 575  
 Ala Gln Leu Arg Ala Gly Gly Gly Gly Arg Asp Ala Pro Glu Ala Ala  
 580 585 590  
 Ala Gln Ser Pro Cys Ser Val Pro Ser Gln Val Pro Thr Pro Gly Phe  
 595 600 605  
 Phe Ser Pro Ala Pro Arg Glu Cys Leu Pro Pro Phe Leu Gly Val Pro  
 610 615 620  
 Lys Pro Gly Leu Tyr Pro Leu Gly Pro Pro Ser Phe Gln Pro Ser Ser  
 625 630 635 640  
 Pro Ala Pro Val Trp Arg Ser Ser Leu Gly Pro Pro Ala Pro Leu Asp  
 645 650 655  
 Arg Gly Glu Asn Leu Tyr Tyr Glu Ile Gly Ala Ser Glu Gly Ser Pro  
 660 665 670  
 Tyr Ser Gly Pro Thr Arg Ser Trp Ser Pro Phe Arg Ser Met Pro Pro  
 675 680 685  
 Asp Arg Leu Asn Ala Ser Tyr Gly Met Leu Gly Gln Ser Pro Pro Leu  
 690 695 700  
 His Arg Ser Pro Asp Phe Leu Leu Ser Tyr Pro Pro Ala Pro Ser Cys  
 705 710 715 720  
 Phe Pro Pro Asp His Leu Gly Tyr Ser Ala Pro Gln His Pro Ala Arg  
 725 730 735  
 Arg Pro Thr Pro Pro Glu Pro Leu Tyr Val Asn Leu Ala Leu Gly Pro  
 740 745 750  
 Arg Gly Pro Ser Pro Ala Ser Ser Ser Ser Ser Ser Pro Pro Ala His  
 755 760 765  
 Pro Arg Ser Arg Ser Asp Pro Gly Pro Pro Val Pro Arg Leu Pro Gln  
 770 775 780  
 Lys Gln Arg Ala Pro Trp Gly Pro Arg Thr Pro His Arg Val Pro Gly  
 785 790 795 800  
 Pro Trp Gly Pro Pro Glu Pro Leu Leu Leu Tyr Arg Ala Ala Pro Pro  
 805 810 815  
 Ala Tyr Gly Arg Gly Gly Glu Leu His Arg Gly Ser Leu Tyr Arg Asn  
 820 825 830  
 Gly Gly Gln Arg Gly Glu Gly Ala Gly Pro Pro Pro Pro Tyr Pro Thr  
 835 840 845  
 Pro Ser Trp Ser Leu His Ser Glu Gly Gln Thr Arg Ser Tyr Cys  
 850 855 860

&lt;210&gt; 5433

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5433

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 cactttggca gtatgagtgt ggggaatagt gtgaacaaca tcccagctgc tatgaccac  
 120  
 ctgggtataa gaagctcctc tgggtctccag agttctcgga gtaaccctc catccaagcc  
 180  
 acgtcaata agactgtgct ttcctcttcc ttaaataacc acccacagac atctgttccc  
 240  
 aacgcattcg ctcttcaccc ttcgctccgt ctgttttccc ttagcaaccc atctctttcc  
 300  
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 360  
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 385

&lt;210&gt; 5434

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5434

Asp	Leu	Thr	Asn	Leu	His	Tyr	Ser	Thr	Pro	Leu	Pro	Ala	Ser	Leu	Asp
1			5						10					15	
Thr	Thr	Asp	His	His	Phe	Gly	Ser	Met	Ser	Val	Gly	Asn	Ser	Val	Asn
			20					25					30		
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
		35					40					45			
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50					55					60				
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
65					70					75					80
Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
			85					90					95		
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
			100				105					110			
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
		115					120					125			

&lt;210&gt; 5435

&lt;211&gt; 617

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5435

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 120  
 ccttgataa gtatactttg tataacttct ggcaaaccat aattatgaac tcacattact  
 180  
 atagtactat aatactgcag aaagggatct tgcgtttcag aaatgtcact catccagttt  
 240

tctctccctt tctctaacct catctccctc ccaggctcat gggttctgtt gcaatcctct  
 300  
 ttctccttac acaaggcaag aagttttctt accaatagat cagacctgtg aaggactgcc  
 360  
 cgacatgata tgatatgggt gttcttcatt ttgggctgta gtattttaaa gtagagggtt  
 420  
 gctctgatgg tcccatcact gcttgccatt gtctttccct ttgctctagc tatcagggga  
 480  
 tgttgcttta agtttggtcc ccaggcttta ctgccaagag ggaaattcat acccacttta  
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 600  
 agttaccctt cagcgt  
 617

<210> 5436  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 5436  
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 His Pro Leu Ile Ala Arg Ala Lys Gly Lys Thr Met Ala Ser Ser Asp  
 20 25 30  
 Gly Thr Ile Arg Ala Asn Leu Tyr Phe Lys Ile Leu Gln Pro Lys Met  
 35 40 45  
 Lys Asn Asn His Ile Arg Ser Cys Arg Ala Val Leu His Arg Ser Asp  
 50 55 60  
 Leu Leu Val Arg Lys Leu Leu Ala Leu Cys Lys Glu Lys Glu Asp Cys  
 65 70 75 80  
 Asn Arg Asn His Glu Pro Gly Arg Glu Met Gly Leu Glu Lys Gly Glu  
 85 90 95  
 Glu Asn Trp Met Ser Asp Ile Ser Glu Thr Gln Asp Pro Phe Leu Gln  
 100 105 110  
 Tyr Tyr Ser Thr Ile Val Met  
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<210> 5437  
 <211> 1422  
 <212> DNA  
 <213> Homo sapiens

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 240  
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gtgggtgtcca acgtccagga gtatcgtgag tttgtgccct ggtgtaagaa gtctctgggtg  
 360  
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&lt;210&gt; 5438

&lt;211&gt; 245

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5438

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<212> PRT

<213> Homo sapiens

<400> 5440

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Gln	Arg	Met	Leu	Asn	Arg	Arg	Pro	Glu	Ile	Val	Val	Ala	Thr	Pro	Gly	35	40	45	
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Thr	Leu	Val	His	Gln	Ala	Pro	Ala	Arg	Ile	Leu	His	Lys	Lys	His	Thr	115	120	125	
Lys	Lys	Met	Asp	Lys	Thr	Ala	Lys	Leu	Asp	Leu	Leu	Met	Gln	Lys	Ile	130	135	140	
Gly	Met	Arg	Gly	Lys	Pro	Lys	Val	Ile	Asp	Leu	Thr	Arg	Asn	Glu	Ala	145	150	155	160
Thr	Val	Glu	Thr	Leu	Thr	Glu	Thr	Lys	Ile	His	Cys	Glu	Thr	Asp	Glu	165	170	175	
Lys	Asp	Phe	Tyr	Leu	Tyr	Tyr	Phe	Leu	Met	Gln	Tyr	Pro	Gly	Arg	Ser	180	185	190	
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Cys	Val	Leu	Leu	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Leu	Asp	Ile	Pro	245	250	255	
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Tyr	Val	His	Arg	Ser	Gly	Arg	Thr	Ala	Arg	Ala	Thr	Asn	Glu	Gly	Leu	275	280	285	
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&lt;211&gt; 1635

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5441

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&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5442

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&lt;211&gt; 2021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5443

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 2021

&lt;210&gt; 5444

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5444

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Leu	Asp	Met	Leu	Asn	Asn	Trp	Asp	Lys	Trp	Met	Ala	Lys	Lys	His	Lys
			20					25					30		
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
			35					40				45			
Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
			50				55				60				
Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
65					70					75				80	
Leu	Asp	Val	Ile	Glu	Arg	Asp	Leu	His	Arg	Gln	Phe	Pro	Phe	His	Glu

				85					90					95	
Met	Phe	Val	Ser	Arg	Gly	Gly	His	Gly	Gln	Gln	Asp	Leu	Phe	Arg	Val
			100					105					110		
Leu	Lys	Ala	Tyr	Thr	Leu	Tyr	Arg	Pro	Glu	Glu	Gly	Tyr	Cys	Gln	Ala
		115					120					125			
Gln	Ala	Pro	Ile	Ala	Ala	Val	Leu	Leu	Met	His	Met	Pro	Ala	Glu	Gln
		130				135					140				
Ala	Phe	Trp	Cys	Leu	Val	Gln	Ile	Cys	Glu	Lys	Tyr	Leu	Pro	Gly	Tyr
145				150					155					160	
Tyr	Ser	Glu	Lys	Leu	Glu	Ala	Ile	Gln	Leu	Asp	Gly	Glu	Ile	Leu	Phe
			165					170					175		
Ser	Leu	Leu	Gln	Lys	Val	Ser	Pro	Val	Ala	His	Lys	His	Leu	Ser	Arg
		180						185					190		
Gln	Lys	Ile	Asp	Pro	Leu	Leu	Tyr	Met	Thr	Glu	Trp	Phe	Met	Cys	Ala
	195					200						205			
Phe	Ser	Arg	Thr	Leu	Pro	Trp	Ser	Ser	Val	Leu	Arg	Val	Trp	Asp	Met
	210					215					220				
Phe	Phe	Cys	Glu	Gly	Val	Lys	Ile	Ile	Phe	Arg	Val	Gly	Leu	Val	Leu
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Leu	Lys	His	Ala	Leu	Gly	Ser	Pro	Glu	Lys	Val	Lys	Ala	Cys	Gln	Gly
			245					250					255		
Gln	Tyr	Glu	Thr	Ile	Glu	Arg	Leu	Arg	Ser	Leu	Ser	Pro	Lys	Ile	Met
			260					265					270		
Gln	Glu	Ala	Phe	Leu	Val	Gln	Glu	Val	Val	Glu	Leu	Pro	Val	Thr	Glu
	275					280					285				
Arg	Gln	Ile	Glu	Arg	Glu	His	Leu	Ile	Gln	Leu	Arg	Arg	Trp	Gln	Glu
	290				295						300				
Thr	Arg	Gly	Glu	Leu	Gln	Cys	Arg	Ser	Pro	Pro	Arg	Leu	His	Gly	Ala
305				310						315				320	
Lys	Ala	Ile	Leu	Asp	Ala	Glu	Pro	Gly	Pro	Arg	Pro	Ala	Leu	Gln	Pro
			325					330					335		
Ser	Pro	Ser	Ile	Arg	Leu	Pro	Leu	Asp	Ala	Pro	Leu	Pro	Gly	Ser	Lys
		340					345					350			
Ala	Lys	Pro	Lys	Pro	Pro	Lys	Gln	Ala	Gln	Lys	Glu	Gln	Arg	Lys	Gln
	355					360					365				
Met	Lys	Gly	Arg	Gly	Gln	Leu	Glu	Lys	Pro	Pro	Ala	Pro	Asn	Gln	Ala
	370				375						380				
Met	Val	Val	Ala	Ala	Ala	Gly	Asp	Ala	Cys	Pro	Pro	Gln	His	Val	Pro
385				390					395					400	
Pro	Lys	Asp	Ser	Ala	Pro	Lys	Asp	Ser	Ala	Pro	Gln	Asp	Leu	Ala	Pro
			405						410				415		
Gln	Val	Ser	Ala	His	His	Arg	Ser	Gln	Glu	Ser	Leu	Thr	Ser	Gln	Glu
			420				425					430			
Ser	Glu	Asp	Thr	Tyr	Leu										
		435													

&lt;210&gt; 5445

&lt;211&gt; 1187

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5445

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 1187

&lt;210&gt; 5446

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5446

Met	Ala	Val	Ile	Lys	Glu	Thr	Val	Thr	Arg	Val	Gly	Arg	Trp	Arg	Cys
1				5				10					15		
Glu	Ser	Lys	His	Thr	Thr	Cys	Ala	Lys	Val	Lys	Trp	Pro	Gln	Pro	Pro
			20					25					30		
Arg	Lys	Thr	Gly	Trp	Arg	Phe	Leu	Arg	Arg	Ser	Thr	His	Ser	Arg	His
		35					40					45			
Gly	Thr	Gln	Trp	Phe	His	Pro	Gln	Val	Cys	Ser	Asn	Arg	His	His	Ser
	50					55				60					
Pro	Arg	Pro	His	Ala	Asp	Ser	Asp	Thr	Arg	Ala	His	Ser	Pro	Arg	Ser

65		70		75		80									
His	Ala	Asp	Ser	Asp	Met	Arg	Ala	His	Ser	Leu	Ser	His	Asp	Ser	Gln
				85					90					95	
Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
			100					105							

&lt;210&gt; 5447

&lt;211&gt; 1444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5447

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 <212> PRT  
 <213> Homo sapiens

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 20 25 30  
 Ala Leu His Ser Ala Leu Gly Gly Thr Lys Lys Lys Lys Lys Thr Ile  
 35 40 45  
 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu  
 50 55 60  
 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn  
 65 70 75 80  
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr  
 85 90 95  
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu  
 100 105 110  
 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly  
 115 120 125  
 Ile Thr Glu Lys Glu Tyr Lys Thr Tyr Lys Glu Asn Phe Leu Lys Arg  
 130 135 140  
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg  
 145 150 155 160  
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 165 170 175  
 Phe Pro Tyr Tyr Lys Cys Gly Ser Glu Arg Ile Leu Val  
 180 185

<210> 5449  
 <211> 1359  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 240



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 360  
 agccacgagt ccagcagctc atcggggtcc gatgaaggca ccgagtacta cccccaccta  
 420  
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 720  
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 780  
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 900  
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 960  
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<210> 5450

<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

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Glu	Met	Lys	Glu	Arg	Gly	Gly	Asn	Gln	Thr	Ser	Gly	Ile	Asp	Phe	Phe
			20					25					30		
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
			35				40					45			
Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro
			50				55				60				
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

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65          70          75          80
Ala Ala Phe Leu Phe Thr Val Cys His Val Gly Ile Xaa Val Gln Asp
      85          90          95
Trp Phe Thr Asp Leu Ser Leu Tyr Arg Phe Leu Gln Thr Ala Glu Met
      100         105         110
Val Lys Pro Ser Thr Pro Ser Pro Ser His Glu Ser Ser Ser Ser Ser
      115         120         125
Gly Ser Asp Glu Gly Thr Glu Tyr Tyr Pro His Leu Val Phe Phe Gln
      130         135         140
Asn Lys Ala Arg Arg Glu Asp Phe Cys Pro Arg Lys Leu Arg Gln Met
145          150         155         160
His Leu Met Ile Asp Gln Leu Met Ala His Ser His Leu Arg Tyr Lys
      165         170         175
Gly Thr Leu Ser Met Leu Gln Cys Asn Val Phe Pro Gly Leu Pro Pro
      180         185         190
Asp Phe Leu Asp Ser Glu Val Asn Leu Phe Leu Val Pro Phe Met Asp
      195         200         205
Ser Glu Ala Glu Ser Glu Asn Pro Pro Arg Ala Gly Pro Gly Ser Ser
      210         215         220
Pro Leu Phe Ser Leu Leu Pro Gly Tyr Arg Gly His Pro Ser Phe Gln
225          230         235         240
Ser Leu Val Ser Lys Leu Arg Ser Gln Val Met Ser Met Ala Arg Pro
      245         250         255
Gln Leu Ser His Thr Ile Leu Thr Glu Lys Asn Trp Phe His Tyr Ala
      260         265         270
Ala Arg Ile Trp Asp Gly Val Arg Lys Ser Ser Ala Leu Ala Glu Tyr
      275         280         285
Ser Arg Leu Leu Ala
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&lt;210&gt; 5451

&lt;211&gt; 1184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5451

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540

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 1184

&lt;210&gt; 5452

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5452

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Arg	Lys	Gly	Ser	His	Leu	Leu	Ser	Leu	Ala	Glu	Pro	Leu	Pro	Pro	Tyr
			20					25					30		
Ser	Ser	Pro	Glu	Leu	Ser	Val	Ala	Phe	His	His	Ser	Gly	Pro	Ser	Cys
		35					40					45			
Leu	Ser	Pro	Ala	Leu	Ser	Gln	Thr	Thr	Gln	Lys	Ser	Gly	His	Leu	Trp
	50					55					60				
Ala	Pro	Gly	Met	Val	Thr	Glu	Glu	Lys	His	Ala	Val	Pro	Val	Ser	Pro
65					70					75					80
Gly	Phe	Cys	Gln	Lys	Ile	Glu	Gln	Val	Gln	Leu	Thr	His	Cys	Tyr	Cys
			85					90					95		
Arg	Ser	Leu	Lys	Leu	Pro	Gly	Leu	Val	Leu	Asp	Pro	Ser	Arg	Asn	His
		100						105					110		
Gln	Val	Arg	His	Leu	Glu	Pro	Pro	Gly	Glu	Gly	Pro	Pro	Ser	Arg	Ala
	115						120					125			
Leu	Lys	Glu	Leu	His	Glu	Ile	Arg	Asn	Cys	Leu	Met	Lys	Cys	Ile	Ser
	130					135					140				
Leu	Tyr	Leu	Glu	Asp	Glu	Ala	Gln	Thr	Pro	Thr	Pro	Leu	Ser	Pro	Pro
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Gly	Leu	Gly	Met	Ser	Pro	Ala	Ala	Arg	Pro	Arg	Ser	Phe	Pro	Gly	Gly
			165						170					175	
Leu	Gly	Glu	Val	Gly	Ala	Gly	Thr	Ile	Ser	Val	Pro	Ser	Thr	Leu	Thr
		180						185					190		
Pro	Ser	Thr	Ser	Glu	Thr	Thr	Leu	Pro	Gln	Pro	Asp	Thr	Glu		

195

200

205

&lt;210&gt; 5453

&lt;211&gt; 1974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5453

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1380

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&lt;210&gt; 5454

&lt;211&gt; 320

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5454

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			20					25					30		
Arg	Ile	Asp	Ser	Lys	Ala	Trp	Arg	Glu	Thr	Leu	Thr	Leu	Gln	Lys	Gln
		35				40					45				
Leu	Arg	Tyr	Arg	Phe	Pro	Glu	Leu	Ala	Asp	Pro	Asp	Thr	Cys	Tyr	Gly
	50				55				60						
Phe	Arg	Phe	Cys	His	Gln	Leu	Asp	Phe	Ser	Thr	Ser	Gly	Ala	Leu	Cys
65				70					75					80	
Val	Ala	Leu	Asn	Lys	Ala	Ala	Ala	Gly	Ser	Ala	Tyr	Arg	Cys	Phe	Lys
			85					90					95		
Glu	Arg	Arg	Val	Thr	Lys	Ala	Tyr	Leu	Ala	Leu	Leu	Arg	Gly	His	Ile
			100					105					110		
Gln	Glu	Ser	Arg	Val	Thr	Ile	Ser	His	Ala	Ile	Gly	Arg	Asn	Ser	Thr
		115				120						125			
Glu	Gly	Arg	Ala	His	Thr	Met	Cys	Ile	Glu	Gly	Ser	Gln	Gly	Val	Ala
	130				135						140				
Gly	Cys	Glu	Asn	Pro	Lys	Pro	Ser	Leu	Thr	Asp	Leu	Val	Val	Leu	Glu
145				150						155				160	
His	Gly	Leu	Tyr	Ala	Gly	Asp	Pro	Val	Ser	Lys	Val	Leu	Leu	Lys	Pro
			165					170					175		
Leu	Thr	Gly	Arg	Thr	His	Gln	Leu	Arg	Val	His	Cys	Ser	Ala	Leu	Gly
		180				185						190			
His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu
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Asp	Arg	Pro	Phe	Arg	Met	Met	Leu	His	Ala	Phe	Tyr	Leu	Arg	Ile	Pro

210		215		220
Thr Asp Thr Glu Cys Val	Glu Val Cys Thr Pro Asp	Pro Phe Leu Pro		
225	230	235	240	
Ser Leu Asp Ala Cys Trp	Ser Pro His Thr Leu Leu	Gln Ser Leu Asp		
	245	250	255	
Gln Leu Val Gln Ala Leu	Arg Ala Thr Pro Asp	Pro Asp Pro Glu Asp		
	260	265	270	
Arg Gly Pro Arg Pro Gly	Ser Pro Ser Ala Leu Leu	Pro Gly Pro Gly		
	275	280	285	
Arg Pro Pro Pro Pro	Thr Lys Pro Pro Glu Thr	Glu Ala Gln Arg		
	290	295	300	
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 <211> 975  
 <212> DNA  
 <213> Homo sapiens

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 240  
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<210> 5456  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

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 Leu Tyr Gly Leu Ala Ser Phe Arg Pro Gly Val Gly Pro His Pro Thr  
 35 40 45  
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr  
 50 55 60  
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala  
 65 70 75 80  
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe  
 85 90 95  
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser  
 100 105 110  
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His  
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<210> 5457  
 <211> 448  
 <212> DNA  
 <213> Homo sapiens

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<210> 5458  
 <211> 81  
 <212> PRT

<213> Homo sapiens

<400> 5458

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          20           25           30
Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
          35           40           45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
          50           55           60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
65           70           75           80
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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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240
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cactcgggtca tgtaccgggt ggactcgggt aagacacgaa tgcagagttt gagtccagat
360
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480
atgtattttg cctgctatga aaacatgaaa aggacttta atgacgtttt ccaccaccaa
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720
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780
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840
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900
gaaaccctga atagaaacaa aacttttgaa tgctggattc aaaaaaaaaa aaaagttatc
960

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<210> 5460

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5460

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			20				25					30			
Ser	Glu	Asp	Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His
		35				40					45				
Met	Thr	Ala	Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr
	50				55					60					
Pro	Val	Asp	Ser	Val	Lys	Thr	Arg	Met	Gln	Ser	Leu	Ser	Pro	Asp	Pro
65					70				75					80	
Lys	Ala	Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Gln
			85					90					95		
Thr	Glu	Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met
		100				105						110			
Gly	Ala	Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met
	115				120						125				
Lys	Arg	Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu
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<210> 5461

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 5461

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1680

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1725

<210> 5462

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5462

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		20						25					30		
Leu	Gly	Ile	Cys	Tyr	Asp	Met	Arg	Phe	Ala	Glu	Leu	Ala	Gln	Ile	Tyr
		35					40					45			
Ala	Gln	Arg	Gly	Cys	Gln	Leu	Leu	Val	Tyr	Pro	Gly	Ala	Phe	Asn	Leu
	50					55					60				
Thr	Thr	Gly	Pro	Ala	His	Trp	Glu	Leu	Leu	Gln	Arg	Ser	Arg	Ala	Val
65					70					75					80
Asp	Asn	Gln	Val	Tyr	Val	Ala	Thr	Ala	Ser	Pro	Ala	Arg	Asp	Asp	Lys
			85						90				95		
Ala	Ser	Tyr	Val	Ala	Trp	Gly	His	Ser	Thr	Val	Val	Asn	Pro	Trp	Gly
		100					105					110			
Glu	Val	Leu	Ala	Lys	Ala	Gly	Thr	Glu	Glu	Ala	Ile	Val	Tyr	Ser	Asp
		115					120					125			
Ile	Asp	Leu	Lys	Lys	Leu	Ala	Glu	Ile	Arg	Gln	Gln	Ile	Pro	Val	Phe
	130					135					140				
Arg	Gln	Lys	Arg	Ser	Asp	Leu	Tyr	Ala	Val	Glu	Met	Lys	Lys	Pro	
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<210> 5463

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5463

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180  
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540

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<210> 5464

<211> 111

<212> PRT

<213> Homo sapiens

<400> 5464

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Leu	His	Asp	Ala	Val	Met	Asn	Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu
			20					25					30		
Gln	Met	Tyr	Asn	Ser	Gln	His	Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr
		35					40					45			
Val	Trp	Arg	Thr	Glu	Gly	Leu	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr
	50					55				60					
Gln	Leu	Thr	Met	Asn	Ile	Pro	Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr
65				70						75				80	
Glu	Phe	Leu	Gln	Glu	Gln	Val	Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln
				85					90					95	
Ser	His	Ile	Ile	Ser	Gly	Gly	Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	
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<210> 5465

<211> 497

<212> DNA

<213> Homo sapiens

<400> 5465

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497

<210> 5466  
<211> 134  
<212> PRT  
<213> Homo sapiens

<400> 5466  
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35 40 45  
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile  
50 55 60  
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg  
65 70 75 80  
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro  
85 90 95  
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro  
100 105 110  
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro  
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Gly Gln Pro Arg Ser Ala  
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<210> 5467  
<211> 1329  
<212> DNA  
<213> Homo sapiens

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540  
accacccgcg tgctgggcct cagccccttg tccaggctgc ccacccccca ccaggccccg  
600

ggagagatga ctcagctgcc agtgatcaaa gcagagcctc tggaggtgaa ccagttcctc  
 660  
 aaagtgaacac cggaggacct ggtgcagatg cctccgacgc cccccagcag ccatggcagt  
 720  
 gacagcgacg gctcccagag tccccgctct ctgccccctt ccagccctgt caggcccatg  
 780  
 gcgcgctcct ccacggccat ctccagctcc ccactcctca cggctcctca taaattacag  
 840  
 gggacatcag gccctctggt cctgacagag gaggagaaga ggaccctgat tgctgagggc  
 900  
 tatcccatcc ccaccaaact cccctcacc aaatcagagg agaaggcctt gaagaaaatt  
 960  
 cggaggaaga tcaagaataa gattttctgct caggaaagta ggagaaagaa gaaagaatac  
 1020  
 atggacagcc tggagaaaaa agtggagtct tgttcaactg agaacttgga gcttcggaag  
 1080  
 aaggtagaga ccctggagaa tgccaacagc ttctccagcg ggatccagcc actcctctgt  
 1140  
 tccctgattg gcctggagaa tcccacctga cccccaccc caccctctg tctctggctg  
 1200  
 gggttccttt ctggcccaaa gtaggtccaa gccctttagt ttatttcgcc acctgctgta  
 1260  
 cattgtggga actgcaacct ctacgtgccc gtttgggtgg agagagatta aacatttgcc  
 1320  
 caccaaaaa  
 1329

<210> 5468

<211> 363

<212> PRT

<213> Homo sapiens

<400> 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
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Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
		20					25					30			
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
		35					40					45			
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50					55					60				
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
65					70					75				80	
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
		85						90					95		
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
		100						105					110		
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
	115						120					125			
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
	130					135					140				
Ser	Ala	Met	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly	
145				150					155					160	
Leu	Ser	Pro	Leu	Ser	Arg	Leu	Pro	Ile	Pro	His	Gln	Ala	Pro	Gly	Glu

165 170 175  
 Met Thr Gln Leu Pro Val Ile Lys Ala Glu Pro Leu Glu Val Asn Gln  
 180 185 190  
 Phe Leu Lys Val Thr Pro Glu Asp Leu Val Gln Met Pro Pro Thr Pro  
 195 200 205  
 Pro Ser Ser His Gly Ser Asp Ser Asp Gly Ser Gln Ser Pro Arg Ser  
 210 215 220  
 Leu Pro Pro Ser Ser Pro Val Arg Pro Met Ala Arg Ser Ser Thr Ala  
 225 230 235 240  
 Ile Ser Ser Ser Pro Leu Leu Thr Ala Pro His Lys Leu Gln Gly Thr  
 245 250 255  
 Ser Gly Pro Leu Val Leu Thr Glu Glu Glu Lys Arg Thr Leu Ile Ala  
 260 265 270  
 Glu Gly Tyr Pro Ile Pro Thr Lys Leu Pro Leu Thr Lys Ser Glu Glu  
 275 280 285  
 Lys Ala Leu Lys Lys Ile Arg Arg Lys Ile Lys Asn Lys Ile Ser Ala  
 290 295 300  
 Gln Glu Ser Arg Arg Lys Lys Lys Glu Tyr Met Asp Ser Leu Glu Lys  
 305 310 315 320  
 Lys Val Glu Ser Cys Ser Thr Glu Asn Leu Glu Leu Arg Lys Lys Val  
 325 330 335  
 Glu Thr Leu Glu Asn Ala Asn Ser Phe Ser Ser Gly Ile Gln Pro Leu  
 340 345 350  
 Leu Cys Ser Leu Ile Gly Leu Glu Asn Pro Thr  
 355 360

&lt;210&gt; 5469

&lt;211&gt; 1292

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5469

nncgcggccg cgctcgacgga aggggaggac gtgggatggt ggccggagctg gctgcagcag  
 60  
 agctaccaag cagtcaaaga gaagtcctct gaagccttgg agtttatgaa gcgggacctg  
 120  
 acggagttaa cccaggtggt gcagcatgac acggcctgta ccatcgagc cacggccagc  
 180  
 gtggtcaagg agaagctggc tacggaaggc tcctcaggag caacagagaa gatgaagaaa  
 240  
 gggttatctg acttcctagg ggtgatctca gacacctttg ccccttcgcc agacaaaacc  
 300  
 atcgactgag atgtcatcac cctgatgggc acaccgtctg gcacagctga gccctatgat  
 360  
 ggcaccaagg ctgcctcta tagcctgcag tcggacccag caacctactg taatgaacca  
 420  
 gatgggcccc cggaattggt tgacgcctgg ctttcccagt tctgcttga ggagaagaag  
 480  
 ggggagatct cagagctcct tgtaggcagc ccctccatcc gggccctcta caccaagatg  
 540  
 gttccagcag ctgtttccca ttcagaattc tggcatcggt atttctataa agtccatcag  
 600  
 ttagagcagg agcaggcccc gagggacgcc ctgaagcagc gggcggaaca gagcatctct  
 660

720	gaagagcccg	gctggggagga	ggaggaagag	gagctcatgg	gcatttcacc	catatctcca
780	aaagaggcaa	aggttcctgt	ggccaaaatt	tctacattcc	ctgaaggaga	acctggcccc
840	cagagcccct	gtgaagagaa	tctggtgact	tcagttgagc	ccccagcaga	ggtgactcca
900	tcagagagca	gtgagagcat	ctccctcgtg	acacagatcg	ccaacccggc	cactgcacct
960	gaggcacgag	tgctacccaa	ggacctgtcc	caaaagctgc	tagaggcatc	cttggaggaa
1020	cagggcctgg	ctgtggatgt	gggtgagact	ggaccctcac	cccctattca	ctccaagccc
1080	ctaacgcctg	ctggccacac	cggcgggcca	gagcccaggc	ctccagccag	agtagagact
1140	ctgagggagg	aggcgcccac	agacttacgg	gtgtttgagc	tgaactcgga	tagtgggaag
1200	tctacaccct	ccaacaatgg	aaagaaaggc	tcaagcacgg	acatcagtga	ggactgggag
1260	aaagactttg	acttgacat	gactgaagag	gaggtgcaga	tggcactttc	caaagtggat
1292	gcctccgggg	agctgaagat	gtagaggggg	aa		

<210> 5470

<211> 427

<212> PRT

<213> Homo sapiens

<400> 5470

Xaa	Ala	Ala	Ala	Ser	Thr	Glu	Gly	Glu	Asp	Val	Gly	Trp	Trp	Arg	Ser
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Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
			20					25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35				40					45				
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
	50					55					60				
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
65				70					75					80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
			85					90					95		
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
			100					105					110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
			115				120					125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
			130			135					140				
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
145				150					155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
			165					170					175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
			180					185					190		
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg



195	200	205
Asp Ala Leu Lys Gln Arg	Ala Glu Gln Ser Ile	Ser Glu Glu Pro Gly
210	215	220
Trp Glu Glu Glu Glu Glu	Glu Leu Met Gly Ile	Ser Pro Ile Ser Pro
225	230	235
Lys Glu Ala Lys Val Pro	Val Ala Lys Ile Ser	Thr Phe Pro Glu Gly
245	250	255
Glu Pro Gly Pro Gln Ser	Pro Cys Glu Glu Asn	Leu Val Thr Ser Val
260	265	270
Glu Pro Pro Ala Glu Val	Thr Pro Ser Glu Ser	Ser Glu Ser Ile Ser
275	280	285
Leu Val Thr Gln Ile Ala	Asn Pro Ala Thr Ala	Pro Glu Ala Arg Val
290	295	300
Leu Pro Lys Asp Leu Ser	Gln Lys Leu Leu Glu	Ala Ser Leu Glu Glu
305	310	315
Gln Gly Leu Ala Val Asp	Val Gly Glu Thr Gly	Pro Ser Pro Pro Ile
325	330	335
His Ser Lys Pro Leu Thr	Pro Ala Gly His Thr	Gly Gly Pro Glu Pro
340	345	350
Arg Pro Pro Ala Arg Val	Glu Thr Leu Arg Glu	Glu Ala Pro Thr Asp
355	360	365
Leu Arg Val Phe Glu Leu	Asn Ser Asp Ser Gly	Lys Ser Thr Pro Ser
370	375	380
Asn Asn Gly Lys Lys Gly	Ser Ser Thr Asp Ile	Ser Glu Asp Trp Glu
385	390	395
Lys Asp Phe Asp Leu Asp	Met Thr Glu Glu Glu	Val Gln Met Ala Leu
405	410	415
Ser Lys Val Asp Ala Ser	Gly Glu Leu Lys Met	
420	425	

<210> 5471  
 <211> 534  
 <212> DNA  
 <213> Homo sapiens

<400> 5471  
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 ctggccccac tacgcggggc ccagagccag ggtgggggat gcagagaccg ggcgtgcggg  
 120  
 ttgccagggtg tggcgacat gtgtgcccgt gggcagagta cagagacaca agcttgtgtg  
 180  
 gacacgaatg ttagctatg tgcgagtgc cacggagtgg tgagtgcagg gaccccaggc  
 240  
 cggcctgcgt cgggtgcgcag ggcataatagg ggcgtgcacg cagtcttggg ggtgtgtgca  
 300  
 cagagcccc ggcacccgcg tgtgtgcaaa gacacaggaa cccgtctgcg tggcgctgtg  
 360  
 tgtgcaaccc aaggaggtgg gcgcttggac tccaaagtgt gcgcttatcc ggatgtggat  
 420  
 gtgggggcag ccggggacag ggctgggtgt gcgtgactcg ggtgtgccgg gacccacaga  
 480  
 gcatatgtgt ccatgcctgg tgctgtgact catgtccctg ggggtgggcac gcgt  
 534

<210> 5472  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

<400> 5472  
 Met Leu Cys Gly Ser Arg His Thr Arg Val Thr His Thr Gln Pro Cys  
 1 5 10 15  
 Pro Arg Leu Pro Pro His Pro His Pro Asp Lys Arg Thr Leu Trp Ser  
 20 25 30  
 Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly  
 35 40 45  
 Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr  
 50 55 60  
 Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln  
 65 70 75 80  
 Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile  
 85 90 95  
 Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His  
 100 105 110  
 Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys  
 115 120 125  
 Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser  
 130 135 140  
 Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala  
 145 150 155 160  
 Ala

<210> 5473  
 <211> 691  
 <212> DNA  
 <213> Homo sapiens

<400> 5473  
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 60  
 cgctgcccgcg ccccgcgccc ccaggaggcc gcaccctgcg ccaggggccg gagacagcaa  
 120  
 catcttcttg ggctgcagg agacctgaca gatgccaaaa caaaggaaca gttgggatcc  
 180  
 aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcatg  
 240  
 gaaaaaacca agtggctgga tatcaaagga aatcatgaaa aagatggagg agctcttatt  
 300  
 actggccaag gaaagcagtc ggagcaacca tacaatttgg tttggacact ttacaacatc  
 360  
 cactattctt tctccatcac caggaatccg gtcaataatg agttcggcta tagcttattt  
 420  
 gtgtggacat ctccatacac ttggtggact gatgcctgtt ttgcacactc gtcacttcca  
 480  
 gggcactttg gaacttgagg tgggagactg gaaggataat aggaggtacc ggatttttgc  
 540

ttttgatcac gacctcttta gctttgcaga tttgatcttt gggaagtggc ctgtgggtct  
 600  
 tatcaccaat cctaaatcac tcctttatag ttgtggtgaa catgaaccac tagaaagact  
 660  
 tcttcactca acccacatta gattggtaac a  
 691

<210> 5474

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5474

Met	Lys	Lys	Met	Glu	Glu	Leu	Leu	Leu	Leu	Ala	Lys	Glu	Ser	Ser	Arg
1				5					10					15	
Ser	Asn	His	Thr	Ile	Trp	Phe	Gly	His	Phe	Thr	Thr	Ser	Thr	Ile	Leu
			20				25						30		
Ser	Pro	Ser	Pro	Gly	Ile	Arg	Ser	Ile	Met	Ser	Ser	Ala	Ile	Ala	Tyr
		35				40						45			
Leu	Cys	Gly	His	Leu	His	Thr	Leu	Gly	Gly	Leu	Met	Pro	Val	Leu	His
	50				55					60					
Thr	Arg	His	Phe	Gln	Gly	Thr	Leu	Glu	Leu	Glu	Val	Gly	Asp	Trp	Lys
65				70						75				80	
Asp	Asn	Arg	Arg	Tyr	Arg	Ile	Phe	Ala	Phe	Asp	His	Asp	Leu	Phe	Ser
			85					90						95	
Phe	Ala	Asp	Leu	Ile	Phe	Gly	Lys	Trp	Pro	Val	Val	Leu	Ile	Thr	Asn
			100				105						110		
Pro	Lys	Ser	Leu	Leu	Tyr	Ser	Cys	Gly	Glu	His	Glu	Pro	Leu	Glu	Arg
		115				120						125			
Leu	Leu	His	Ser	Thr	His	Ile	Arg	Leu	Val	Thr					
		130				135									

<210> 5475

<211> 628

<212> DNA

<213> Homo sapiens

<400> 5475

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 gacaagtacg ggaagcccaa caagaggaaa ggcttcaatg aagggtctgtg ggagatccag  
 120  
 aacaaccccc acgccagcta cagcgcccct ccgccagtga gctcctccga cagcgaggcc  
 180  
 cccgaggcca accccgccga cggcagtga gctgacgagg acgatgagga ccgggggggtc  
 240  
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac  
 300  
 tcagacaaga gtagecgaaa cagtggcctg aagaggaaga cgcctgcgct aaagatgtcg  
 360  
 gtctcgaaac gagcccgaag ggctccagc gacctggatc aggccagcgt gtccccatcc  
 420  
 gaagaggaga actcggaaag ctcatctgag tcggagaaga ccagcgacca ggacttcaca  
 480

cctgagaaga aagcagcggg cggggcgcca cggagggggc ctctgggggg acggaaaaaa  
 540  
 aagaaggcgc cgtcagcctc cgactccgac tccaaggccg attcggacgg ggccaagcct  
 600  
 gagccggtgg ccatggcgcg gtcggcgt  
 628

<210> 5476  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

<400> 5476  
 Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro Tyr  
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 Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe  
 20 25 30  
 Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser  
 35 40 45  
 Ala Pro Pro Val Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn  
 50 55 60  
 Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val  
 65 70 75 80  
 Met Ala Val Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu  
 85 90 95  
 Ser Asp Ser Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg  
 100 105 110  
 Lys Thr Pro Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala  
 115 120 125  
 Ser Ser Asp Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn  
 130 135 140  
 Ser Glu Ser Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr  
 145 150 155 160  
 Pro Glu Lys Lys Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly  
 165 170 175  
 Gly Arg Lys Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys  
 180 185 190  
 Ala Asp Ser Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser  
 195 200 205  
 Ala

<210> 5477  
 <211> 727  
 <212> DNA  
 <213> Homo sapiens

<400> 5477  
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 60  
 ggctgggcag tccccagcc ggtttgtcca cagcccctgg gggcagtgga ggtgaatata  
 120  
 gggcccttct cactgagctc gtgaagtgcc tcaagtcaagg caaggtcccc tgggtccatat  
 180

gggccccccc gcccatgggg ttgggctggg ccttatagtg cctacgttag tctgtgtgga  
 240  
 gcccttgccc agcgggggag aaaaagggtgg cttctgggtcc gtctgtataa aacatggccc  
 300  
 ctcacctgtc gggccccccac acagctggca ggctgggctg gcctctcacc cctggcctcc  
 360  
 cctggacccc tggctggctc ctcaacttca ctctccgcac ttagtgcccg gccgccccca  
 420  
 gactcatcgt cgctcagccc atagggaagc ccaggcctgg ccccagaga gtctccttcc  
 480  
 gagtctctct cgaagcccat gagctgggtca ctgttgccgt cgccttcctc ctcttcctct  
 540  
 tcctcctcaa actccagatc ctggcctagt agcaaatac tctccaatac caggggccccg  
 600  
 ggtccttcgt cgaggggagtc ttcagtatcc actttgaccc cctcgcatctt cacgggctgc  
 660  
 ggggtggcttt gcttccttcg gggcatcgtg accggctcca gcccgacgcg cctccggcct  
 720  
 gcggccg  
 727

<210> 5478

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5478

Ser	Ala	Ser	Val	Lys	Ala	Arg	Ser	Pro	Gly	Pro	Tyr	Gly	Pro	Pro	Arg
1				5					10					15	
Pro	Trp	Gly	Trp	Ala	Gly	Pro	Tyr	Ser	Ala	Tyr	Val	Ser	Leu	Cys	Gly
			20					25					30		
Ala	Pro	Gly	Gln	Arg	Gly	Arg	Lys	Arg	Trp	Leu	Leu	Val	Arg	Leu	Tyr
		35					40					45			
Lys	Thr	Trp	Pro	Leu	Thr	Cys	Arg	Pro	Pro	Thr	Gln	Leu	Ala	Gly	Trp
	50					55				60					
Ala	Gly	Leu	Ser	Pro	Leu	Ala	Ser	Pro	Gly	Pro	Leu	Ala	Gly	Ser	Ser
65					70				75					80	
Thr	Ser	Leu	Ser	Ala	Leu	Ser	Ala	Arg	Pro	Pro	Pro	Asp	Ser	Ser	Ser
			85					90					95		
Leu	Ser	Pro													

<210> 5479

<211> 1386

<212> DNA

<213> Homo sapiens

<400> 5479

gccggcacca cagaccgaga agaagccact cggctcttgg ctgagaagcg gcgccaggcc  
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 120  
 atgcgagagg agcagctggc acgggaggcc gagggccggg cggagcgggg ggcggaggcc  
 180

cggaggcggg aggagcagga ggcacgagag aaggcgcagg ccgagcagga ggagcaggag  
 240  
 cggctgcaga agcagaaaaga ggaggccgaa gctcggtcgc gggaagaggc ggagcggcag  
 300  
 cgtctggagc gggaaaagca cttccagcag caggagcaag agcggcaaga gcgcagaaaag  
 360  
 cgtctggagg agatcatgaa gaggactcgg aagtcagaag tttctgaaac caagcagaag  
 420  
 caggacagca aggaggccaa cgccaacggg tccagcccag agcctgtgaa agctgtggag  
 480  
 gctcgggtccc cagggtctga gaaggaggct gtgcagaaaag aggagcccat cccacaggag  
 540  
 cctcagtggg gtctcccaag caaggagttg ccagcgtccc tggatgaatgg cctgcagcct  
 600  
 ctcccagcac accaggagaa tggcttctcc accaacggac cctctgggga caagagtctg  
 660  
 agccgaacac cagagacact cctgcccttt gcagaggcag aagccttcct caagaaagct  
 720  
 gtggtgcagt ccccgaggt cacagaagtc ctttaagagg gtttgcttg gatccgggca  
 780  
 cagttgtgag ggctcctctg catcacctac caggatgtct ggaggagaaa aagacagaac  
 840  
 aaagatggaa gtggcctggg cccctggggg tgggtcctct ctgttgtttt taatctgcac  
 900  
 cttatagact gatgtctctt tggccggagc cagatctgcc cctcagtga ttcgtgtgct  
 960  
 cgacgcgca gacatccctt ctccccata cacacatata cactcacagc ctctctggcc  
 1020  
 tcttcccttg gggaggggac acctgtagta tttgccttga tttggtgggg tacagtggat  
 1080  
 gtgaatactg taaatagctt gtgctcagac tcctctgcgt ggagaggggtg ggtgcaggag  
 1140  
 gcagaccctc cccccaaagc cccctgggga gatcttctc tctctattta actgtaactg  
 1200  
 agggggatcc cagggtctggg gatgggggac acctggggc acaggatact ggttgcttca  
 1260  
 ggggtaccca tgccccctgc cctcgcctgg aatcagtgtt actgcatctg attaaatgtc  
 1320  
 tccagaaata aagaataatt ctgccaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1380  
 aaaaaa  
 1386

&lt;210&gt; 5480

&lt;211&gt; 251

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5480

Ala	Gly	Thr	Thr	Asp	Arg	Glu	Glu	Ala	Thr	Arg	Leu	Leu	Ala	Glu	Lys
1				5					10					15	
Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Glu	Gln	Glu	Arg	Arg
			20				25						30		
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

35 40 45  
 Glu Ala Glu Ala Arg Ala Glu Arg Glu Ala Glu Ala Arg Arg Arg Glu  
 50 55 60  
 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu  
 65 70 75 80  
 Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu  
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 Thr Arg Lys Ser Glu Val Ser Glu Thr Lys Gln Lys Gln Asp Ser Lys  
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 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro  
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&lt;210&gt; 5481

&lt;211&gt; 1513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5481

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&lt;210&gt; 5482

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5482

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		20						25					30		
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp	
		35					40					45			
Phe	Lys	Leu	Asp	Phe	Gly	Asn	Ser	Gln	Gly	Lys	Thr	Ser	Gln	Thr	Trp
	50					55				60					
His	Gly	Gly	Ile	Ala	Thr	Ile	Phe	Gln	Ser	Pro	Gly	Asp	Glu	Leu	Trp
65					70				75					80	
Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
				85				90					95		
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
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&lt;210&gt; 5483

&lt;211&gt; 1552

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5483

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1140

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<210> 5484  
 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<400> 5484

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			20					25					30		
Ile	Asp	Ile	Ile	Asn	Leu	Asp	Thr	Phe	Thr	Tyr	Ile	Glu	Ser	Ala	Ser
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Glu	Leu	Arg	Gly	Gly	Phe	Asp	Trp	Ser	Leu	His	Phe	Gln	Trp	Glu	Gln
	50					55					60				
Leu	Ser	Pro	Glu	Gln	Lys	Ala	Arg	Arg	Leu	Asp	Pro	Thr	Glu	Pro	Ile
65					70				75					80	
Arg	Thr	Pro	Ile	Ile	Ala	Gly	Gly	Leu	Phe	Val	Ile	Asp	Lys	Ala	Trp
			85					90					95		
Phe	Asp	Tyr	Leu	Gly	Lys	Tyr	Asp	Met	Asp	Met	Asp	Ile	Trp	Gly	Gly
	100						105					110			
Glu	Asn	Phe	Glu	Ile	Ser	Phe	Arg	Val	Trp	Met	Cys	Gly	Gly	Ser	Leu
	115					120					125				
Glu	Ile	Val	Pro	Cys	Ser	Arg	Val	Gly	His	Val	Phe	Arg	Lys	Lys	His
	130					135					140				
Pro	Tyr	Val	Phe	Pro	Asp	Gly	Asn	Ala	Asn	Thr	Tyr	Ile	Lys	Asn	Thr
145					150					155				160	
Lys	Arg	Thr	Ala	Glu	Val	Trp	Met	Asp	Glu	Tyr	Lys	Gln	Tyr	Tyr	Tyr
			165					170					175		
Ala	Ala	Arg	Pro	Phe	Ala	Leu	Glu	Arg	Pro	Phe	Gly	Asn	Val	Glu	Ser
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	195					200					205				
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	210					215					220				
Gln	Lys	Gly	Asn	Ile	Arg	Gln	Arg	Gln	Lys	Cys	Leu	Glu	Ser	Gln	Arg
225					230					235				240	
Gln	Asn	Asn	Gln	Glu	Thr	Pro	Asn	Leu	Lys	Leu	Ser	Pro	Cys	Ala	Lys
			245					250					255		
Val	Lys	Gly	Glu	Asp	Ala	Lys	Ser	Gln	Val	Trp	Ala	Phe	Thr	Tyr	Thr

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Gln Lys Ile	Leu Gln Glu Glu	Leu Cys Leu Ser Val	Ile Thr Leu Phe		
	275		280		285
Pro Gly Ala	Pro Val Val Leu Val	Leu Cys Lys Asn Gly	Asp Asp Arg		
	290		295		300
Gln Gln Trp	Thr Lys Thr Gly Ser His	Ile Glu His Ile Ala	Ser His		
	305		310		315
Leu Cys Leu	Asp Thr Asp Met Phe Gly	Asp Gly Thr Glu Asn	Gly Lys		
		325		330	335
Glu Ile Val	Val Asn Pro Cys Glu Ser	Ser Leu Met Ser	Gln His Trp		
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Asp Met Val	Ser Ser				
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&lt;210&gt; 5485

&lt;211&gt; 1549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5485

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<210> 5486

<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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			20					25					30		
Arg	Ser	Arg	Ser	Arg	Ser	Phe	Ser	Arg	Ser	Ser	Arg	Ser	His	Ser	Arg
			35					40				45			
Val	Ser	Ser	Arg	Phe	Ser	Ser	Arg	Ser	Arg	Arg	Ser	Lys	Ser	Arg	Ser
			50				55				60				
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65					70				75					80	
Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90						95	
Arg	Tyr	Gly	Phe	Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg
			100					105					110		
Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Ser	Tyr	Cys	Gly
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Arg	Ala	Tyr	Ala	Ile	Ala	Arg	Gly	Gln	Arg	Tyr	Tyr	Gly	Phe	Gly	Arg
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Thr	Val	Tyr	Pro	Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr
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Arg	Ser	Arg	Ser	Arg	Thr	Pro	Phe	Arg	Leu	Ser	Glu	Lys	Asp	Arg	Met
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Glu	Leu	Leu	Glu	Ile	Ala	Lys	Thr	Asn	Ala	Ala	Lys	Ala	Leu	Gly	Thr
			180					185					190		
Thr	Asn	Ile	Asp	Leu	Pro	Ala	Ser	Leu	Arg	Thr	Val	Pro	Ser	Ala	Lys
			195				200					205			
Glu	Thr	Ser	Arg	Gly	Ile	Gly	Val	Ser	Ser	Asn	Gly	Ala	Lys	Pro	Glu
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<212> DNA
<213> Homo sapiens
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1140

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<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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			20					25					30		
Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met	Gly	Ala
		35					40					45			
Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met	Lys	Arg
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Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu	Ala	Asn
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Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu	Leu	His	Asp	Ala	Val	Met	Asn
				85				90						95	
Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu	Gln	Met	Tyr	Asn	Ser	Gln	His
			100					105					110		
Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr	Val	Trp	Arg	Thr	Glu	Gly	Leu
	115						120					125			
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			165					170						175	
Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val	Cys
	180						185					190			
Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Asn	Val	Ala	Leu	Ser	Leu	Ala	Asn
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Ile	Ser	Gly	Arg	Leu	Ser	Gly	Met	Ala	Asn	Ala	Phe	Arg	Thr	Val	Tyr

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 <212> DNA  
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&lt;213&gt; Homo sapiens

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Arg	Arg	Arg	Arg	Cys	Ser	Arg	Leu	Phe							
	340						345								

&lt;210&gt; 5497

&lt;211&gt; 1056

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5497

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 420  
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 1056



<210> 5498  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 5498  
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                   20                  25                  30  
 Ala Gln Leu Trp Trp Ser Ser Pro Phe Ile His Ser Pro Gly Glu Thr  
           35                  40                  45  
 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys  
           50                  55                  60  
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met  
           65                  70                  75                  80  
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg  
                   85                  90                  95  
 Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser  
                   100                  105                  110  
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp  
                   115                  120                  125  
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<210> 5499  
 <211> 1918  
 <212> DNA  
 <213> Homo sapiens

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           600

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 1800  
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 1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

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20					25					30					
Leu	Arg	Phe	Asn	Glu	Thr	Thr	Leu	Cys	Lys	Pro	Leu	Val	Pro	Arg	Glu
35						40				45					
His	Gln	Phe	Tyr	Glu	Thr	Leu	Pro	Ala	Glu	Met	Arg	Lys	Phe	Thr	Pro
50				55				60							
Gln	Tyr	Lys	Gly	Val	Val	Ser	Val	Arg	Phe	Glu	Glu	Asp	Glu	Asp	Arg
65			70				75				80				
Asn	Leu	Cys	Leu	Ile	Ala	Tyr	Pro	Leu	Lys	Gly	Asp	His	Gly	Ile	Val
		85				90						95			
Asp	Ile	Ala	His	Asn	Ser	Asp	Cys	Glu	Pro	Lys	Ser	Lys	Leu	Leu	Arg
		100				105						110			
Trp	Thr	Thr	Asn	Lys	Lys	His	His	Val	Leu	Glu	Thr	Glu	Lys	Thr	Pro
115				120				125							
Lys	Asp	Trp	Val	Arg	Gln	His	Arg	Lys	Glu	Glu	Lys	Met	Lys	Ser	His
130			135				140								
Lys	Leu	Glu	Glu	Glu	Phe	Glu	Trp	Leu	Lys	Lys	Ser	Glu	Val	Leu	Tyr
145			150				155				160				
Tyr	Thr	Val	Glu	Lys	Lys	Gly	Asn	Ile	Ser	Ser	Gln	Leu	Lys	His	Tyr
		165				170						175			
Asn	Pro	Trp	Ser	Met	Lys	Cys	His	Gln	Gln	Gln	Leu	Gln	Arg	Met	Lys
		180				185						190			
Glu	Asn	Ala	Lys	His	Arg	Asn	Gln	Tyr	Lys	Phe	Ile	Leu	Leu	Glu	Asn
195				200				205							
Leu	Thr	Ser	Arg	Tyr	Glu	Val	Pro	Cys	Val	Leu	Asp	Leu	Lys	Met	Gly
210			215				220								
Thr	Arg	Gln	His	Gly	Asp	Ala	Ser	Glu	Glu	Lys	Ala	Ala	Asn	Gln	
225			230				235				240				
Ile	Arg	Lys	Cys	Gln	Gln	Ser	Thr	Ser	Ala	Val	Ile	Gly	Val	Xaa	Val
		245				250						255			
Cys	Gly	Met	Gln	Val	Tyr	Gln	Ala	Gly	Ser	Gly	Gln	Leu	Met	Phe	Met
		260				265						270			
Asn	Lys	Tyr	His	Gly	Arg	Lys	Leu	Ser	Val	Gln	Gly	Phe	Lys	Glu	Ala
275				280				285							
Leu	Phe	Gln	Phe	Phe	His	Asn	Gly	Arg	Tyr	Leu	Arg	Arg	Glu	Leu	Leu
290			295				300								
Gly	Pro	Val	Leu	Lys	Lys	Leu	Thr	Glu	Leu	Lys	Ala	Val	Leu	Glu	Arg
305			310				315				320				
Gln	Glu	Ser	Tyr	Arg	Phe	Tyr	Ser	Ser	Ser	Leu	Leu	Val	Ile	Tyr	Asp
		325				330						335			
Gly	Lys	Glu	Arg	Pro	Glu	Val	Val	Leu	Asp	Ser	Asp	Ala	Glu	Asp	Leu
		340				345						350			
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<210> 5501  
<211> 568

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5501

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 568

&lt;210&gt; 5502

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5502

Met	Ile	Leu	Gly	Lys	Arg	Leu	His	Leu	Asn	Phe	Arg	Tyr	Phe	Thr	Cys
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Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
		35				40						45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
	50				55					60					
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65				70					75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
			85					90						95	
Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
			100					105					110		

&lt;210&gt; 5503

&lt;211&gt; 1679

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5503

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240  
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300  
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420  
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1679

<210> 5504  
 <211> 392  
 <212> PRT  
 <213> Homo sapiens

<400> 5504

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Leu Pro Pro Ser Cys Thr Ile Ser Gly Glu Lys Lys Pro Pro Ala Val
      35              40              45
Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
      50              55              60
Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
65              70              75              80
Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
      85              90              95
Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
      100             105             110
Ala Met Gly Leu Ala Pro Thr Ser Ser Pro Gly Ala Pro Asn Ser Ala
      115             120             125
Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
      130             135             140
His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
145             150             155             160
Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
      165             170             175
Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
      180             185             190
Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
      195             200             205
Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
      210             215             220
Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
225             230             235             240
Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
      245             250             255
Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
      260             265             270
Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
      275             280             285
Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
      290             295             300
Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
305             310             315             320
Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
      325             330             335
Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
      340             345             350
Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
      355             360             365
Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

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<210> 5505  
 <211> 1099  
 <212> DNA  
 <213> Homo sapiens

<400> 5505  
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 1099

<210> 5506  
 <211> 280  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 5506

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 Glu Leu Pro Glu Asn Ile Leu Leu Glu Leu Phe Thr His Val Pro Ala  
 35 40 45  
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp  
 50 55 60  
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly  
 65 70 75 80  
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe  
 85 90 95  
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala  
 100 105 110  
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu  
 115 120 125  
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn  
 130 135 140  
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Thr Cys Leu Lys  
 145 150 155 160  
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu  
 165 170 175  
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg  
 180 185 190  
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala  
 195 200 205  
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln  
 210 215 220  
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn  
 225 230 235 240  
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp  
 245 250 255  
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser  
 260 265 270  
 Ile Thr Ile Gly Pro Pro Leu Pro  
 275 280

&lt;210&gt; 5507

&lt;211&gt; 1658

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5507

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 gacagcatgt atggtgaatg tcggacctac atcattcatt actatcttat ggatgatagc  
 240  
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1658

&lt;210&gt; 5508

&lt;211&gt; 448

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5508

Xaa Leu Glu Ser Gln Gly Ile Glu Leu Asn Pro Pro Glu Lys Met Ala

1	5	10	15
Leu Asp Pro Tyr Thr Glu Leu Arg Lys Gln Pro Leu Arg Lys Tyr Val			
20	25	30	
Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
145	150	155	160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
420	425	430	
Gly Glu Gly Lys Ile Asn Tyr Tyr Asn Phe Val Arg Ala Phe Ser Asn			

435

440

445

&lt;210&gt; 5509

&lt;211&gt; 818

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5509

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818

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&lt;210&gt; 5510

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5510

```

Met Trp Leu Ser Thr Ser Pro Tyr Arg Lys Gly Ser Gln Cys Gly Glu
1          5          10          15
Ala Phe Ser Gln Ile Pro Gly His Asn Leu Asn Lys Lys Thr Pro Pro
20          25          30
Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly
35          40          45
Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro
50          55          60
Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys
65          70          75          80
Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

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 His Ser Gly Glu Asn Leu Tyr Glu Cys  
 100 105

<210> 5511  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 5511  
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<210> 5512  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

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 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr  
 35 40 45  
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu  
 50 55 60  
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys  
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<210> 5513  
 <211> 837  
 <212> DNA  
 <213> Homo sapiens

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837

&lt;210&gt; 5514

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5514

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Ala	Glu	Arg	Ser	Lys	Ala	Thr	Ala	Ala	Ala	Leu	Gly	Ser	Phe	Pro	Ala
			20					25					30		
Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
		35					40					45			
Val	Ser	Glu	Asp	Gly	Asp	Trp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly
		50				55					60				
Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
65				70						75				80	
Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
			85						90				95		
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
			100					105					110		
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
		115						120				125			
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
	130					135					140				
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145					150					155				160	
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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                165                170                175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
                180                185                190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
                195                200                205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
                210                215                220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225                230                235                240
Glu Ala Val Ser Leu Asp Asp Ala
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&lt;210&gt; 5515

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5515

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&lt;210&gt; 5516

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5516

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Val Cys Thr Asn Pro Leu Ser Ile Leu Glu Ala Val Met Ala His Cys
1          5          10          15
Lys Lys Met Gln Glu Arg Met Ser Ala Gln Leu Ala Ala Glu Ser
20        25        30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
35        40        45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Glu Arg Gly Lys
50        55        60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65        70        75        80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85        90        95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100       105       110
Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517  
 <211> 804  
 <212> DNA  
 <213> Homo sapiens

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<210> 5518  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 5518  
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 Ile Val Val Gly Ser Ser Asp Arg Ile Arg Ala Ser Ser Leu Gln Val  
 35 40 45  
 Gln Lys Gln Phe Lys Thr Leu Met Ile Ala Leu Gln Gln Pro Thr His  
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 Gly Asp Met Val Ile Val Pro Thr Cys Cys Ser Val Ile Cys Arg Ala  
 65 70 75 80  
 Ser Asp Trp Phe Lys

85

<210> 5519  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

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<210> 5520  
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 <212> PRT  
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<400> 5520  
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 Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu  
 35 40 45  
 Gly Asn Ala Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Phe  
 50 55 60  
 Leu Arg Pro Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala  
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<210> 5521  
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 <212> DNA  
 <213> Homo sapiens

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 120



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<210> 5522

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5522

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&lt;210&gt; 5524

&lt;211&gt; 1193

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5524

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<212> PRT

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<212> DNA

<213> Homo sapiens

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 Glu Ala Met Glu Ala Ala Gly His Ser Ile Ser Thr Leu Phe Leu Cys  
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 Gly Ala Ala Val Leu Gly Ala Cys Ala Ser Gly Asp Phe Ala Ser Val  
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 Gln Glu Ala Met Ala Lys Met Ser Lys Val Gly Lys Val Val Phe Pro  
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&lt;210&gt; 5530

&lt;211&gt; 603

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5530

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Lys	Arg	Arg	Phe	Ser	Glu	Met	Gln	Asn	Glu	Arg	Arg	Glu	Gln	Ala	Gln
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<211> 593

<212> PRT

<213> Homo sapiens

<400> 5532

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&lt;210&gt; 5533

&lt;211&gt; 505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5533

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<210> 5534  
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<212> PRT  
<213> Homo sapiens

<400> 5534  
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1887

&lt;210&gt; 5536

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5536

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Pro Gly Glu Thr Pro Lys His Gln Pro Gly Ser Pro Arg Gly Ser Gly
      35           40           45
Arg Glu Glu Asp Asp Glu Leu Leu Gly Asn Asp Asp Ser Asp Lys Thr
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Glu Leu Leu Ala Gly Gln Lys Lys Ser Ser Pro Phe Trp Thr Phe Glu
65           70           75           80
Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
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Ile Lys Gly Ser Leu Leu Pro Ile Pro Gly Lys Asn Phe Val Arg Leu
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Tyr Ile Arg Ser Asn Pro Asp Leu Tyr Gly Pro Phe Trp Ile Cys Ala
      115          120          125
Thr Leu Val Phe Ala Ile Ala Ile Ser Gly Asn Leu Ser Asn Phe Leu
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Ile His Leu Gly Glu Lys Thr Tyr His Tyr Val Pro Glu Phe Arg Lys
145          150          155          160
Val Ser Ile Ala Ala Thr Ile Ile Tyr Ala Tyr Ala Trp Leu Val Pro
      165          170          175
Leu Ala Leu Trp Gly Phe Leu Met Trp Arg Asn Ser Lys Val Met Asn
      180          185          190
Ile Val Ser Tyr Ser Phe Leu Glu Ile Val Cys Val Tyr Gly Tyr Ser
      195          200          205
Leu Phe Ile Tyr Ile Pro Thr Ala Ile Leu Trp Ile Ile Pro Gln Lys
      210          215          220
Ala Val Arg Trp Ile Leu Val Met Ile Ala Leu Gly Ile Ser Gly Ser
225          230          235          240
Leu Leu Ala Met Thr Phe Trp Pro Ala Val Arg Glu Asp Asn Arg Arg
      245          250          255
Val Ala Leu Ala Thr Ile Val Thr Ile Val Leu Leu His Met Leu Leu
      260          265          270
Ser Val Gly Cys Leu Ala Tyr Phe Phe Asp Ala Pro Glu Met Asp His
      275          280          285
Leu Pro Thr Thr Thr Ala Thr Pro Asn Gln Thr Val Ala Ala Ala Lys
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Ser Ser
305

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&lt;210&gt; 5537

&lt;211&gt; 2881

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5537

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&lt;210&gt; 5538

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5538

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 Gly Trp Ser Leu Phe Leu Gln Arg Tyr Tyr Gln Val Val His Glu Gly  
 20 25 30  
 Ala Glu Leu Arg His Leu Asp Thr Gln Val Gln Arg Cys Glu Asp Ile  
 35 40 45  
 Leu Gln Gln Leu Gln Ala Val Val Pro Gln Ile Asp Met Glu Gly Asp



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Ile Met Cys Met Asp His Leu Glu Glu Met Leu Lys Leu Val Asn Gly		80
	85	90
Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr Ile		95
	100	105
Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln Trp		110
	115	120
Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg Asp		125
	130	135
Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu Asp		140
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Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn		155
	165	170
Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser		175
	180	185
Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp		190
	195	200
Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu		205
	210	215
Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu		220
	225	230
Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile		235
	245	250
Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala		255
	260	265
Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp		270
	275	280
Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr		285
	290	295
Lys Gln Pro Val Thr Thr Ser Pro Ala Ser Thr Pro Arg Pro Ser Cys		300
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Leu Leu Pro Met Tyr Ser Asp Thr Arg Ala Arg Ser Ser Asp Asp Ser		315
	325	330
Thr Ala Ser Trp Trp Ala Leu Arg Pro Cys Arg Pro Gln Ala Arg Pro		335
	340	345
		350

&lt;210&gt; 5539

&lt;211&gt; 1887

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5539

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1860  
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1887

&lt;210&gt; 5540

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5540

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Gln Cys Cys Glu Leu Glu Ala Gly Glu Leu Gly Met Ala Val Pro Ala
 20           25           30
Ala Ala Met Gly Pro Ser Ala Leu Gly Gln Ser Gly Pro Gly Ser Met
 35           40           45
Ala Pro Trp Cys Ser Val Ser Ser Gly Pro Ser Arg Tyr Val Leu Gly
 50           55           60
Met Gln Glu Leu Phe Arg Gly His Ser Lys Thr Arg Glu Phe Leu Ala
 65           70           75           80
His Ser Ala Lys Val His Ser Val Ala Trp Ser Cys Asp Gly Arg Arg
 85           90           95
Leu Ala Ser Gly Ser Phe Asp Lys Thr Ala Ser Val Phe Leu Leu Glu
100           105           110
Arg Thr Gly Trp Ser Lys Lys Thr Ile Ile Gly Asp Met Gly Ile Xaa
115           120           125
Val Asp Gln Leu Cys Trp His Pro Ser Asn Pro Asp Leu Phe Val Thr
130           135           140
Ala Ser Gly Asp Lys Thr Ile Arg Ile Trp Asp Val Arg Thr Thr Lys
145           150           155           160
Cys Ile Ala Thr Val Asn Thr Lys Gly Glu Asn Ile Asn Ile Cys Trp
165           170           175
Ser Pro Asp Gly Gln Thr Ile Ala Val Gly Asn Lys Asp Asp Val Val
180           185           190
Thr Phe Ile Asp Ala Lys Thr His Arg Ser Lys Ala Glu Glu Gln Phe
195           200           205
Lys Phe Glu Val Asn Glu Ile Ser Trp Asn Asn Asp Asn Asn Met Phe
210           215           220
Phe Leu Thr Asn Gly Asn Gly Cys Ile Asn Ile Leu Ser Tyr Pro Glu
225           230           235           240
Leu Lys Pro Val Gln Ser Ile Asn Ala His Pro Ser Asn Cys Ile Cys
245           250           255
Ile Lys Phe Asp Pro Met Gly Lys Tyr Phe Ala Thr Gly Ser Ala Asp
260           265           270
Ala Leu Val Ser Leu Trp Asp Val Asp Glu Leu Val Cys Val Arg Cys
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Gly Lys Met Leu Ala Ser Ala Ser Glu Asp His Phe Ile Asp Ile Ala
305           310           315           320
Glu Val Glu Thr Gly Asp Lys Leu Trp Glu Val Gln Cys Glu Ser Pro
325           330           335
Thr Phe Thr Val Ala Trp His Pro Lys Arg Pro Leu Leu Ala Phe Ala
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Cys Asp Asp Lys Asp Gly Lys Tyr Asp Ser Ser Arg Glu Ala Gly Thr
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Val Lys Leu Phe Gly Leu Pro Asn Asp Ser

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370

375

&lt;210&gt; 5541

&lt;211&gt; 1854

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5541

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<210> 5542

<211> 315

<212> PRT

<213> Homo sapiens

<400> 5542

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&lt;210&gt; 5543

&lt;211&gt; 4021

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5543

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&lt;210&gt; 5544

&lt;211&gt; 1141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5544

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Gln	Glu	Leu	Leu	Ala	Leu	Lys	Gln	Gln	Gln	Gln	Leu	Gln	Lys	Gln	Leu	
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&lt;210&gt; 5545

&lt;211&gt; 1932

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5545

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&lt;210&gt; 5546

<211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 5546

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Thr Thr Ile Ala Thr Ser Glu Gln Ser Thr Gly Ser Cys Asp Thr Ser
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Pro Asp Thr Val Ser Pro Ser Leu Ser Pro Gly Phe Glu Asp Leu Ser
145         150         155         160
His Val Gln Pro Gly Ser Pro Ala Ile Asn Gly Arg Ser Gln Thr Asp
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Asp Glu Glu Met Thr Gly Glu
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<210> 5547  
 <211> 1391  
 <212> DNA  
 <213> Homo sapiens

<400> 5547

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540

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 1391

&lt;210&gt; 5548

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5548

Xaa	Val	Leu	Arg	Arg	Thr	Val	Ser	Tyr	Arg	Leu	Leu	Leu	Trp	Gly	Arg
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Gly	Ser	Leu	Ala	Arg	Lys	Gln	Gly	Leu	Trp	Lys	Thr	Ala	Ala	Pro	Glu
			20					25					30		
Leu	Gln	Thr	Asn	Val	Arg	Ser	Gln	Ile	Leu	Arg	Leu	Arg	His	Thr	Ala
		35					40				45				
Phe	Val	Ile	Pro	Lys	Lys	Asn	Val	Pro	Thr	Ser	Lys	Arg	Glu	Thr	Tyr
	50					55				60					
Thr	Glu	Asp	Phe	Ile	Lys	Lys	Gln	Ile	Glu	Glu	Phe	Asn	Ile	Gly	Lys
65					70					75				80	
Arg	His	Leu	Ala	Asn	Met	Met	Gly	Glu	Asp	Pro	Glu	Thr	Phe	Thr	Gln
			85					90					95		
Glu	Asp	Ile	Asp	Arg	Ala	Ile	Ala	Tyr	Leu	Phe	Pro	Ser	Gly	Leu	Phe
		100						105					110		
Glu	Lys	Arg	Ala	Arg	Pro	Val	Met	Lys	His	Pro	Glu	Gln	Ile	Phe	Pro
		115					120						125		
Arg	Gln	Arg	Ala	Ile	Gln	Trp	Gly	Glu	Asp	Gly	Arg	Pro	Phe	His	Tyr

130		135		140
Leu Phe Tyr Thr Gly Lys Gln Ser Tyr Tyr Ser	Leu Met His Asp Val			
145	150	155	160	
Xaa Met Glu Cys Tyr Ser Ile				
	165			

&lt;210&gt; 5549

&lt;211&gt; 1865

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5549

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<210> 5550

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5550

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Arg	Trp	Ser	Arg	Tyr	Ser	Pro	Glu	Phe	Lys	Asp	Pro	Leu	Ile	Asp	Lys	35	40	45	
Glu	Tyr	Tyr	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr	50	55	60	
Val	Arg	Glu	Leu	Lys	Lys	Thr	Gln	Leu	Ile	Lys	Ala	Ala	Pro	Ala	Gly	65	70	75	80
Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn	85	90	95	
Met	Met	Met	Ile	Gly	Gly	Asn	Lys	Val	Leu	Ala	Arg	Ser	Leu	Met	Ile	100	105	110	
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala	115	120	125	
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile	130	135	140	
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro	145	150	155	160
Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp	165	170	175	
Arg	Arg	Arg	Arg	Phe	Leu	Ala	Met	Lys	Trp	Met	Ile	Thr	Glu	Cys	Arg	180	185	190	
Asp	Lys	Lys	His	Gln	Arg	Thr	Leu	Met	Pro	Glu	Lys	Leu	Ser	His	Lys				



195	200	205
Leu Leu Glu Ala Phe His Asn Gln Gly Pro Val	Ile Lys Arg Lys His	
210	215	220
Asp Leu His Lys Met Ala Glu Ala Asn Arg Ala	Leu Ala His Tyr Arg	
225	230	235
Trp Trp		240

&lt;210&gt; 5551

&lt;211&gt; 1689

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5551

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660
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 1689

<210> 5552

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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		20						25					30		
Tyr	Leu	Leu	Asp	Pro	Tyr	Val	Asn	Leu	Ala	Pro	Gly	Cys	Arg	Ser	Leu
		35					40					45			
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
	50					55					60				
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Leu	Val	Arg	Lys	Arg	Leu
65					70					75				80	
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
			85					90						95	
Ala	Leu	Thr	Val	Ser	Ser	Ile	Cys								
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<210> 5553

<211> 274

<212> DNA

<213> Homo sapiens

<400> 5553

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274

<210> 5554  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 5554  
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Pro Gln Pro His Pro Thr Ala Ser Pro Asp Pro Lys Val Arg Ile Thr  
35 40 45  
Gly Pro Ala Thr Ala Pro Ala Val Val Leu Ser His Tyr Arg Gly Cys  
50 55 60  
Tyr Phe Pro Ser Gln Cys Pro Trp Gln Pro Trp Lys Pro Met Lys Gln  
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Ala Leu Thr Gln Glu Ser Leu Cys Ile Phe  
85 90

<210> 5555  
<211> 414  
<212> DNA  
<213> Homo sapiens

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180  
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240  
cacatccaaa cctgaaccca gcacctggcc ccacacctgt cccctggcta gagacggggg  
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414

<210> 5556  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 5556  
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Gly Gln Arg Ser Asp Val Gly Phe Arg Lys Gln Gly Pro Gly Gly Asp  
20 25 30  
Glu Ser Gln Gly Cys Asp Ser Arg Arg Asp Ser Cys Glu Gly Pro Gly

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      35              40              45
Gln Ala Lys Leu Glu Asp Ser Pro Asp Leu Arg Gly Ser Thr Arg Ser
      50              55              60
Arg Cys Leu Leu Asp Leu Ser His Ser Ala His Pro Asn Leu Asn Pro
      65              70              75              80
Ala Pro Gly Pro Thr Pro Val Pro Trp Leu Glu Thr Gly Ala Ser Ala
      85              90              95
Gln Leu Phe Pro Phe Ser His Ser Leu Ser Ala Ala Cys Arg Val His
      100              105              110
Ser Ala Ser
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<210> 5557

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 5557

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1080

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 1860  
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 1920  
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 1970

&lt;210&gt; 5558

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5558

Met	Asp	Asp	Phe	Thr	Pro	Pro	Gly	Ser	Gly	Ala	Cys	Lys	Phe	Ile	Gly
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Ser	Leu	His	Ser	Tyr	Ser	Phe	Ser	Ser	Lys	His	Thr	Arg	Glu	Arg	Pro
			20					25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
		35				40					45				
Glu	Pro	Ser	Cys	Ser	Gly	Ser	Ser	Leu	Gly	Pro	Asp	Lys	Gly	Leu	Ala
	50				55					60					
Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
65				70					75					80	
Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
			85					90					95		
Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
		100						105					110		
Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
	115						120					125			
His	Ser	Tyr	Cys	Phe	Ser	Ser	Arg	Gln	Asn	Lys	Ser	Gln	Val	Cys	Cys

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 145                      150                      155                      160  
 Gln Arg Val Ser Arg Ser Asp Ser Gln Val Arg Lys Leu Gln Glu Lys  
                     165                      170                      175  
 Leu Asp Glu Leu Arg Arg Val Ser Val Pro Tyr Pro Ser Ser Leu Leu  
                     180                      185                      190  
 Ser Pro Ser Arg Glu Pro Pro Lys Met Asn Pro Val Val Glu Pro Leu  
                     195                      200                      205  
 Ser Trp Met Leu Gly Thr Trp Leu Ser Asp Pro Pro Gly Ala Gly Thr  
                     210                      215                      220  
 Tyr Pro Thr Leu Gln Pro Phe Gln Tyr Leu Glu Glu Val His Ile Ser  
 225                      230                      235                      240  
 His Val Gly Gln Pro Met Leu Asn Phe Ser Phe Asn Ser Phe His Pro  
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&lt;210&gt; 5559

&lt;211&gt; 3866

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5559

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 Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys Tyr Ser His His Arg  
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 Leu Thr Glu Asn Ala Glu Val Lys Leu Val Asp Phe Gly Val Ser Ala  
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 Gln Leu Asp Arg Thr Val Gly Arg Arg Asn Thr Phe Ile Gly Thr Pro  
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 Thr Tyr Asp Tyr Arg Ser Asp Leu Trp Ser Cys Gly Ile Thr Ala Ile  
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 Glu Met Ala Glu Gly Ala Pro Pro Leu Cys Asp Met His Pro Met Arg  
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 Lys Trp Ser Lys Lys Phe Ile Asp Phe Ile Asp Thr Cys Leu Ile Lys  
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 Ile Arg Asp Gln Pro Thr Glu Arg Gln Val Arg Ile Gln Leu Lys Asp  
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 His Ile Asp Arg Thr Arg Lys Lys Arg Gly Glu Lys Glu Glu Thr Glu  
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 Gly Glu Pro Ser Ser Ile Met Asn Val Pro Gly Glu Ser Thr Leu Arg

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      820              825              830
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      835              840              845
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Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln
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Cys Ser Ile Lys Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly
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Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val
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Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn
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&lt;210&gt; 5561

&lt;211&gt; 2089

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<211> 372

<212> PRT

<213> Homo sapiens

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<211> 2878

<212> DNA

<213> Homo sapiens

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<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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Tyr	Leu	Ser	Thr	Glu	Ala	Gly	Gln	Arg	Gly	Ser	Ala	Leu	Gly	Asp	Leu



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Val	Asp	Ser	Gly	Ser	Lys	Arg	Trp	Ser	Gly	Asn	Glu	Ser	Thr	Asp	Glu
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Phe	Ser	Glu	Leu	Ser	Phe	Arg	Ile	Ser	Glu	Leu	Ala	Arg	Glu	Pro	Arg
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Gly	Pro	Arg	Glu	Arg	Lys	Glu	Asp	Gly	Ser	Ala	Asp	Gly	Asp	Pro	Val
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Gln	Ile	Asp	Phe	Ile	Asp	Ser	His	Val	Pro	Gly	Glu	Asp	Glu	Glu	Arg
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Gly	Thr	Val	Glu	Glu	Gln	Arg	Pro	Pro	Glu	Leu	Ser	Pro	Gly	Ala	Gly
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Glu	Arg	Arg	Arg	Pro	Asp	Thr	Leu	Gln	Leu	Trp	Gln	Glu	Arg	Glu	Arg
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Arg	Gln	Gln	Gln	Gln	Ser	Gly	Ala	Trp	Gly	Ala	Pro	Arg	Lys	Asp	Ser
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Leu	Leu	Lys	Pro	Gly	Leu	Arg	Ala	Val	Val	Gly	Gly	Ala	Ala	Ala	Val
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Ser	Thr	Gln	Ala	Met	His	Asn	Gly	Ser	Pro	Lys	Ser	Ser	Ala	Ser	Gln
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Gln	Glu	Pro	Leu	Pro	Ile	Ala	Gly	Pro	Ala	Thr	Ala	Pro	Ala	Pro	Arg
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Glu	Ala	Cys	Arg	Lys	Met	Gly	Val	Pro	Glu	Ala	Asp	Leu	Cys	Ser	Pro
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Ser	Asp	Leu	Leu	Gln	Gly	Thr	Ala	Arg	Gly	Leu	Arg	Thr	Ala	Leu	Glu
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Ala	Val	Lys	Arg	Val	Gly	Gly	Lys	Ala	Leu	Pro	Pro	Leu	Trp	Pro	Pro
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Ser	Gly	Leu	Gly	Gly	Phe	Val	Val	Phe	Tyr	Val	Val	Leu	Met	Leu	Leu
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 <211> 472  
 <212> DNA  
 <213> Homo sapiens

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<210> 5566  
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<400> 5566  
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 Leu Pro Pro Arg Leu Glu Ser Gly Gly Ala Ile Thr Ala His Ser Ser  
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<210> 5567  
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 <212> DNA  
 <213> Homo sapiens

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 180  
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 968

&lt;210&gt; 5568

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5568

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			20					25					30		
His	Arg	Ser	Ile	His	Leu	Ala	Pro	Leu	Gln	Ile	Trp	Val	Leu	Cys	Lys
			35					40				45			
Ile	Leu	Pro	Trp	Asp	Thr	Glu	Gly	Lys	Ser	Asp	Thr	Ala	Leu	Leu	Ser
			50				55				60				
Ser	Ser	Gln	Thr	Leu	Arg	Tyr	Pro	Asp	Thr	Thr	Ala	Leu	Ile	Val	Ser
65					70					75				80	
Glu	Asn	Thr	Ala	Thr	Ser	Ala	Gly	Lys	Tyr	Gln	Arg	Cys	Phe	Thr	Arg
				85					90					95	
Tyr	Met	Tyr	Gln	Ile	Leu	Lys	Ala	Ala	Val	Pro	Lys	Tyr	His	Lys	Leu
			100					105					110		
His	Gly	Leu	Lys	Gln	Gln	Lys	Phe	Ile	Pro	Ser	Gln	Ser	Trp	Arg	Pro
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Asp	Val														

&lt;210&gt; 5569

&lt;211&gt; 876

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5569

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876

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&lt;210&gt; 5570

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5570

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Leu Val Gln Ala Val Glu Tyr Asn Ile Phe Glu Gly Met Glu Cys His
20           25           30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35           40           45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50           55           60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65           70           75           80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85           90           95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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Val Leu Gln Ala Phe Ile Ser Phe Arg Ala Ala Pro Ser Leu Cys Pro
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Gly Thr Leu Ala Lys Met Gln Cys Leu Pro Asn Ser His Ile Ser Phe
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Gln Val Gln Val Pro Val Cys Asp Gly
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<210> 5571  
 <211> 405  
 <212> DNA  
 <213> Homo sapiens

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<210> 5572  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

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<400> 5572
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Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp Asp
35     40     45
Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn His
50     55     60
Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu Leu
65     70     75     80
Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu His
85     90     95
His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Met Met Ala
100    105    110
Gln Ile Phe Ser Gln Arg Leu Ala Gly Ala Gly Gly Gly Tyr Arg
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Ser Arg Leu Gly Val Pro Arg

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130

135

<210> 5573  
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 <212> DNA  
 <213> Homo sapiens

<400> 5573

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<210> 5574

<211> 312  
 <212> PRT  
 <213> Homo sapiens

<400> 5574

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      20           25           30
Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu
      35           40           45
Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
      50           55           60
Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
      65           70           75           80
Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
      85           90           95
Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly
      100          105          110
Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn
      115          120          125
Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
      130          135          140
Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
      145          150          155          160
Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro
      165          170          175
Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile
      180          185          190
Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
      195          200          205
Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
      210          215          220
Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
      225          230          235          240
Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr
      245          250          255
Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu
      260          265          270
Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp
      275          280          285
Ala Val Asn Gln Ala Arg Leu Asp Gln Val Ile Ala Gly Ala Val His
      290          295          300
Lys Thr Ile Arg Arg Glu Leu Asn
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<210> 5575  
 <211> 2405  
 <212> DNA  
 <213> Homo sapiens

<400> 5575

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1680



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 2405

<210> 5576

<211> 367

<212> PRT

<213> Homo sapiens

<400> 5576

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		20						25					30		
Gln	Ala	Leu	Thr	Gly	Asn	Glu	Gly	Arg	Val	Ser	Val	Glu	Asn	Ile	Lys
		35				40						45			
Gln	Leu	Leu	Gln	Cys	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala
	50					55				60					
Glu	Ile	Leu	Ala	Glu	Ile	Ala	Arg	Ile	Leu	Arg	Pro	Gly	Gly	Cys	Leu
65				70				75						80	
Phe	Leu	Lys	Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val
			85					90					95		
Lys	Thr	Ala	Ser	Lys	Leu	Cys	Ser	Ala	Leu	Thr	Leu	Ser	Gly	Leu	Val
		100						105					110		
Glu	Val	Lys	Glu	Leu	Gln	Arg	Glu	Pro	Leu	Thr	Pro	Glu	Glu	Val	Gln
		115				120						125			
Ser	Val	Arg	Glu	His	Leu	Gly	His	Glu	Ser	Asp	Asn	Leu	Leu	Phe	Val
	130					135					140				
Gln	Ile	Thr	Gly	Lys	Lys	Pro	Asn	Phe	Glu	Val	Gly	Ser	Ser	Arg	Gln
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Leu	Lys	Leu	Ser	Ile	Thr	Lys	Lys	Ser	Ser	Pro	Ser	Val	Lys	Pro	Ala

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<210> 5577
<211> 659
<212> DNA
<213> Homo sapiens
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120
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180
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240
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360
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480
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<210> 5578  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 5578

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Leu Leu Gln Tyr Gly Asp Met Glu Glu Gly Xaa Gln Pro Ala Tyr Pro
      20           25           30
Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu
      35           40           45
Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys
      50           55           60
Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg
65           70           75           80
Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu
      85           90           95
Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met
      100          105          110
Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu
      115          120          125
Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg
      130          135          140
Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp
145          150          155          160
Cys Ser Ile Ala Glu Pro
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<210> 5579  
 <211> 1312  
 <212> DNA  
 <213> Homo sapiens

<400> 5579

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180
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240
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420
caagtgcata ctgagcccc acgccccgtg caccagcac ccttaccaga agctccacaa
480
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540

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 1312

&lt;210&gt; 5580

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5580

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Gln	Pro	Ile	Gln	Pro	Ala	Pro	Pro	Leu	Gln	Pro	Ser	Gly	Val	Pro	Thr
			20					25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
	35					40						45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
	50					55					60				
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
65					70					75					80
Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85					90					95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
		100						105						110	
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
		115						120					125		
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
	130					135						140			
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
145						150					155				160
Pro	Gln	Arg	Leu	Pro	Pro	Glu	Ala	Ala	Ser	Thr	Ser	Leu	Pro	Gln	Lys

				165				170				175			
Pro	His	Leu	Lys	Leu	Ala	Arg	Val	Gln	Ser	Gln	Asn	Gly	Ile	Val	Leu
				180				185				190			
Ser	Trp	Ser	Val	Leu	Glu	Val	Asp	Arg	Ser	Cys	Ala	Thr	Val	Asp	Ser
				195				200				205			
Tyr	His	Leu	Tyr	Ala	Tyr	His	Glu	Glu	Pro	Ser	Ala	Thr	Val	Pro	Ser
				210				215				220			
Gln	Trp	Lys	Lys	Ile	Gly	Glu	Val	Lys	Ala	Leu	Pro	Leu	Pro	Met	Ala
225				230				235				240			
Cys	Thr	Leu	Thr	Gln	Phe	Val	Ser	Gly	Ser	Lys	Tyr	Tyr	Phe	Ala	Val
				245				250				255			
Arg	Ala	Lys	Asp	Ile	Tyr	Gly	Arg	Phe	Gly	Pro	Phe	Cys	Asp	Pro	Gln
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Ser	Thr	Asp	Val	Ile	Ser	Ser	Thr	Gln	Ser	Ser					
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<210> 5581
<211> 720
<212> DNA
<213> Homo sapiens
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120
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180
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240
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<210> 5582
<211> 212
<212> PRT
<213> Homo sapiens
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<400> 5582  
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<210> 5583
<211> 2101
<212> DNA
<213> Homo sapiens
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4764

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780  
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960  
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2100  
a  
2101

&lt;210&gt; 5584

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5584

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 Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala  
 35 40 45  
 Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe  
 50 55 60  
 Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His  
 65 70 75 80  
 Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala  
 85 90 95  
 Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser  
 100 105 110  
 Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu  
 115 120 125  
 Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp  
 130 135 140  
 Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln  
 145 150 155 160  
 Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr  
 165 170 175  
 Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys  
 180 185 190  
 Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp  
 195 200 205  
 Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His  
 210 215 220  
 Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val  
 225 230 235 240  
 Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys  
 245 250 255  
 Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln  
 260 265 270  
 Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu  
 275 280 285  
 Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His  
 290 295 300  
 Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met  
 305 310 315 320  
 Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser  
 325 330 335  
 Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val  
 340 345 350  
 Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr  
 355 360 365  
 Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu  
 370 375 380  
 Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp



385                      390                      395                      400  
 Glu His Met Ala Gln Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe  
                                  405                      410                      415  
 Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu  
                                  420                      425                      430  
 Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser  
                                  435                      440                      445  
 Lys Glu Asp Pro Ser Val  
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<210> 5585  
 <211> 740  
 <212> DNA  
 <213> Homo sapiens

<400> 5585  
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 120  
 ctcaacaagaa taaaatatac aatgctacat tgagtgggta aaaatacaca aaaaagtagt  
 180  
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 240  
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 300  
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 360  
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<210> 5586  
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 <212> PRT  
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&lt;210&gt; 5590

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5590

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Cys	Ser	Ala	Gly	Pro	Lys	Gly	Asp	Asn	Ile	Tyr	Glu	Trp	Arg	Ser	Thr
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Cys	Leu	Asp	Ile	Leu	Lys	Asp	Asn	Trp	Ser	Pro	Ala	Leu	Thr	Ile	Ser
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Lys	Val	Leu	Leu	Ser	Ile	Cys	Ser	Leu	Leu	Thr	Asp	Cys	Asn	Pro	Ala
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200

205

&lt;210&gt; 5591

&lt;211&gt; 2194

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5591

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&lt;210&gt; 5592

&lt;211&gt; 580

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5592

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Thr	Pro	Leu	Pro	Ser	Gly	Asp	Val	Ala	Ala	Thr	Phe	Gln	Phe	Arg	Thr
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 <213> Homo sapiens

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 <211> 2240  
 <212> DNA  
 <213> Homo sapiens

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<210> 5598

<211> 312

<212> PRT

<213> Homo sapiens

<400> 5598

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&lt;210&gt; 5599

&lt;211&gt; 4492

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&lt;400&gt; 5599

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<213> Homo sapiens

<400> 5600

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4785

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		900					905						910		
Ser	Gly	Leu	Trp	Ser	Pro	Ala	Tyr	Ala	Ser	His					
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&lt;210&gt; 5601

&lt;211&gt; 670

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5601

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 <212> PRT  
 <213> Homo sapiens

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 Arg Arg Thr Thr Ala Ser Leu Leu Arg Lys Leu Thr Thr Ala Ser Asn  
 35 40 45  
 Gly Gly Val Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val  
 50 55 60  
 Gln Glu Pro Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys  
 65 70 75 80  
 Gln Gly Thr Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met  
 85 90 95  
 Ser Ser Leu Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu  
 100 105 110  
 Leu Ser Val Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile  
 115 120 125  
 Ser Glu Phe Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val  
 130 135 140  
 Leu Lys Lys Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg  
 145 150 155 160  
 Lys Arg Ser Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu  
 165 170 175  
 Lys Arg Val Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln  
 180 185 190  
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 Val Pro Leu His Ala  
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<210> 5603  
 <211> 2070  
 <212> DNA  
 <213> Homo sapiens

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420  
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720  
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1980

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 2070

<210> 5604

<211> 560

<212> PRT

<213> Homo sapiens

<400> 5604

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			20					25					30		
His	Val	Cys	Arg	Pro	Pro	Gly	Asn	Val	Ser	Gln	Val	Val	Phe	His	Asn
		35					40					45			
His	Ser	Asn	Trp	Ser	Leu	Glu	Asp	Thr	Gly	Ala	Leu	Leu	Ser	Ser	Gly
		50				55					60				
Gln	Lys	Asp	Tyr	Val	Thr	Val	Gln	Leu	Gln	Asn	Gly	Glu	Ile	Trp	Glu
65					70				75					80	
Leu	Ser	Arg	Cys	Ser	Arg	Asn	Lys	Arg	Glu	Asn	Thr	Ser	Ser	Leu	Gly
			85					90						95	
Tyr	Glu	Tyr	Thr	Gly	Ser	Lys	Lys	Glu	Phe	Pro	Cys	Val	Asp	Gly	Tyr
			100					105					110		
Ile	Tyr	Asp	Gln	Asn	Thr	Trp	Lys	Ser	Thr	Ala	Val	Thr	Gln	Trp	Asn
		115					120					125			
Leu	Val	Cys	Asp	Arg	Lys	Trp	Leu	Ala	Met	Leu	Ile	Gln	Pro	Leu	Phe
		130				135					140				
Met	Phe	Gly	Val	Leu	Leu	Gly	Ser	Val	Thr	Phe	Gly	Tyr	Phe	Ser	Asp
145				150					155					160	
Arg	Leu	Gly	Arg	Arg	Val	Val	Leu	Trp	Ala	Thr	Ser	Ser	Ser	Met	Phe
			165					170						175	
Leu	Phe	Gly	Ile	Ala	Ala	Ala	Phe	Ala	Val	Asp	Tyr	Tyr	Thr	Phe	Met
		180					185						190		
Ala	Ala	Arg	Phe	Phe	Leu	Ala	Met	Val	Ala	Ser	Gly	Tyr	Leu	Val	Val
		195				200					205				
Gly	Phe	Val	Tyr	Val	Met	Glu	Phe	Ile	Gly	Met	Lys	Ser	Arg	Thr	Trp
		210			215					220					
Ala	Ser	Val	His	Leu	His	Ser	Phe	Phe	Ala	Val	Gly	Thr	Leu	Leu	Val
225			230						235					240	
Ala	Leu	Thr	Gly	Tyr	Leu	Val	Arg	Thr	Trp	Trp	Leu	Tyr	Gln	Met	Ile
			245					250					255		
Leu	Ser	Thr	Val	Thr	Val	Pro	Phe	Ile	Leu	Cys	Cys	Trp	Val	Leu	Pro
		260					265					270			
Glu	Thr	Pro	Phe	Trp	Leu	Leu	Ser	Glu	Gly	Arg	Tyr	Glu	Glu	Ala	Gln
		275				280					285				
Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys	Lys
		290			295				300						
Leu	Ser	Glu	Leu	Leu	Ser	Leu	Asp	Leu	Gln	Gly	Pro	Val	Ser	Asn	Ser
305				310					315					320	
Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn	Trp
			325					330					335		
Ser	Ile	Thr	Lys	Arg	Thr	Leu	Thr	Val	Trp	Leu	Ile	Trp	Phe	Thr	Gly

	340		345		350										
Ser	Leu	Gly	Phe	Tyr	Ser	Phe	Ser	Leu	Asn	Ser	Val	Asn	Leu	Gly	Gly
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Tyr	Thr	Phe	Val	Cys	Ile	Ala	Met	Asp	Lys	Val	Gly	Arg	Arg	Thr	Val
385					390					395				400	
Leu	Ala	Tyr	Ser	Leu	Phe	Cys	Ser	Ala	Leu	Ala	Cys	Gly	Val	Val	Met
			405						410				415		
Val	Ile	Pro	Gln	Lys	His	Tyr	Ile	Leu	Gly	Val	Val	Thr	Ala	Met	Val
		420						425				430			
Gly	Lys	Phe	Ala	Ile	Gly	Ala	Ala	Phe	Gly	Leu	Ile	Tyr	Leu	Tyr	Thr
	435					440					445				
Ala	Glu	Leu	Tyr	Pro	Thr	Ile	Val	Arg	Ser	Leu	Ala	Val	Gly	Ser	Gly
	450					455				460					
Ser	Met	Val	Cys	Arg	Leu	Ala	Ser	Ile	Leu	Ala	Pro	Phe	Ser	Val	Asp
465					470				475					480	
Leu	Ser	Ser	Ile	Trp	Ile	Phe	Ile	Pro	Gln	Leu	Phe	Val	Gly	Thr	Met
			485					490					495		
Ala	Leu	Leu	Ser	Gly	Val	Leu	Thr	Leu	Lys	Leu	Pro	Glu	Thr	Leu	Gly
	500							505				510			
Lys	Arg	Leu	Ala	Thr	Thr	Trp	Glu	Glu	Ala	Ala	Lys	Leu	Glu	Ser	Glu
	515					520					525				
Asn	Glu	Ser	Lys	Ser	Ser	Lys	Leu	Leu	Leu	Thr	Thr	Asn	Asn	Ser	Gly
	530					535				540					
Leu	Glu	Lys	Thr	Glu	Ala	Ile	Thr	Pro	Arg	Asp	Ser	Gly	Leu	Gly	Glu
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&lt;210&gt; 5605

&lt;211&gt; 376

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5605

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180  
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240  
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300  
catgccacgg ccttgtaggc agaaccctta agtctctttg tagggacccc tttggtctcc  
360  
cctttgaact acgccc  
376

&lt;210&gt; 5606

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 5606

```

Met Thr Arg Ala Leu Leu Thr Ser Leu Val Leu Leu Pro Ala Arg Gln
 1           5           10           15
Ala His Pro Cys Arg Ala Leu Ala Leu Thr Ala Pro Ile Phe Leu Leu
      20           25           30
Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
      35           40           45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50           55           60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
      65           70           75           80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
      85           90           95
Phe Pro Phe Thr Arg
      100

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&lt;210&gt; 5607

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5607

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caagccgggc ggcctcagca
320

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&lt;210&gt; 5608

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5608

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Val His Thr Arg Gly Ile Gly Ser Arg Leu Leu Thr Lys Met Gly Tyr
 1           5           10           15
Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
      20           25           30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35           40           45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50           55           60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
      65           70           75           80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
      85           90           95
Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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100

105

&lt;210&gt; 5609

&lt;211&gt; 1843

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5609

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1380

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 1680  
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 1740  
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 1800  
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<210> 5610

<211> 153

<212> PRT

<213> Homo sapiens

<400> 5610

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			20					25					30		
Phe	Thr	Gly	Gly	Arg	Gln	Asp	His	Thr	Ser	Leu	Pro	His	Trp	Ala	Cys
		35				40						45			
Leu	Leu	Val	Asp	Ser	Cys	Met	Gln	Glu	Ala	Val	Met	Gly	Ser	Leu	Arg
	50				55					60					
Ile	Pro	Gln	Cys	Gly	Asn	Gly	Pro	Leu	Arg	Leu	Val	Leu	Arg	Val	Pro
65				70					75				80		
Gly	Ala	Gln	Ser	Trp	Val	Gly	Gly	Cys	Trp	Trp	Glu	Val	Arg	Asn	Lys
			85				90						95		
Phe	Trp	Leu	Pro	Ser	Gly	Gln	Leu	Pro	Thr	Ala	Leu	Thr	Trp	Glu	Val
			100				105					110			
Asp	Ala	His	Arg	Gln	Asp	Ala	Leu	Gly	Tyr	Cys	Cys	Thr	Val	Leu	His
		115				120						125			
Glu	Ile	Phe	Ile	Gln	Pro	Thr	Arg	Phe	Asn	Arg	Ser	Leu	Gly	Ser	Ser
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Ser	Arg	Leu	Leu	Cys	Leu	Phe	Lys	His							
145					150										

<210> 5611

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 5611

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cgggtcctgg cgctcagag cccggcccag gccgcggaac ggtgatgctc gggccggacg  
 180  
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 240  
 gcagagaccc gtggattgct gtgccctgcc ctccggacct ggatcatgaa ggtgttgagg  
 300  
 agaagcttct tctgggtgct gtttcccgtc cttccctggg cgggtgcaggc tgtggagcac  
 360  
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 420  
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 660  
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 780  
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 840  
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 900  
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 960  
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 1080  
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 1140  
 tggcgatgta ca  
 1152

&lt;210&gt; 5612

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5612

Met	Lys	Val	Leu	Gly	Arg	Ser	Phe	Phe	Trp	Val	Leu	Phe	Pro	Val	Leu
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Pro	Trp	Ala	Val	Gln	Ala	Val	Glu	His	Glu	Glu	Val	Ala	Gln	Arg	Val
			20					25					30		
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
		35					40					45			
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
	50					55					60				
Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile	Gly	Ala	Val	Glu	Lys
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180
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240
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300
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360
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420
cctgcaaatt gggaagccaa aaaagctcgt ttggagtggg aactaaagga agagc aaaag
480
aaaaaggaat gtgcggcaag aggagaagac tatgagaaag tgaagttgct ggagatcagt
540
gcagaagatg cagaaagatg ggagaggaaa aagaagagga aaaaccctga tctgggattt
600
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tcagattatg ctgctgcccc gttacgccag tatcatcggt tgaccaagca gatcaaacct  
 660  
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 720  
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 780  
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 840  
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 1020  
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 1080  
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 1679

&lt;210&gt; 5614

&lt;211&gt; 242

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5614

Ser	Gln	Phe	Ser	Leu	Ser	Gln	Val	Leu	Val	Asp	Ser	Ala	Glu	Glu	Gly
1				5					10					15	
Ser	Leu	Ala	Ala	Ala	Ala	Glu	Leu	Ala	Ala	Gln	Lys	Arg	Glu	Gln	Arg
			20					25					30		
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
		35					40				45				
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
	50					55				60					
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
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Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

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180
ctttatcagc ctatgcagcc tcatcctcag catttggtt ctatgggttt tgatccaagg
240
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300
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360
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420
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540
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600
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660
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720
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780

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&lt;210&gt; 5616

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5616

Pro	Ala	Val	Leu	Ser	Gly	Tyr	Phe	Lys	Gln	Phe	Gln	Lys	Ser	Leu	Pro
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Pro	Arg	Phe	Gln	Arg	Gln	Gln	Glu	Gln	Met	Lys	Gln	Gln	Gln	Trp	Gln
	20						25						30		
Gln	Gln	Gln	Gln	Gln	Gly	Val	Leu	Pro	Gln	Thr	Val	Pro	Ser	Gln	Pro
	35					40						45			
Ser	Ser	Ser	Thr	Val	Pro	Pro	Pro	His	Arg	Pro	Leu	Tyr	Gln	Pro	
	50				55				60						
Met	Gln	Pro	His	Pro	Gln	His	Leu	Ala	Ser	Met	Gly	Phe	Asp	Pro	Arg
65				70					75					80	
Trp	Leu	Met	Met	Gln	Ser	Tyr	Met	Asp	Pro	Arg	Met	Met	Ser	Gly	Arg
			85					90						95	
Pro	Ala	Met	Asp	Ile	Pro	Pro	Ile	His	Pro	Gly	Met	Ile	Pro	Pro	Lys
	100						105					110			
Pro	Leu	Met	Arg	Arg	Asp	Gln	Met	Glu	Gly	Ser	Pro	Asn	Ser	Ser	Glu
	115					120					125				
Ser	Phe	Glu	His	Ile	Ala	Arg	Ser	Ala	Arg	Asp	His	Ala	Ile	Ser	Leu
	130				135					140					
Ser	Glu	Pro	Arg	Met	Leu	Trp	Gly	Ser	Asp	Pro	Tyr	Pro	His	Ala	Glu
145				150				155						160	
Pro	Gln	Gln	Ala	Thr	Thr	Pro	Lys	Ala	Thr	Glu	Glu	Pro	Glu	Asp	Val



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Arg Ser Glu Ala Ala Leu Asp Gln Glu Gln Ile Thr Ala Ala Tyr Ser
      180              185              190
Val Glu His Asn Gln Leu Glu Ala His Pro Lys Ala Asp Phe Ile Arg
      195              200              205
Glu Ser Ser Glu Ala Gln Val Gln Lys Phe Leu Ser Arg Ser Val Glu
      210              215              220
Asp Val Arg Pro His His Thr Asp Ala Asn Asn Gln Ser Ala Cys Phe
225              230              235              240
Glu Ala Pro Asp Gln Lys Thr Leu Ser Thr Pro Gln Glu Glu Arg Ile
      245              250              255
Ser Ala Val Glu Ser Gln Pro Ser Arg Lys Arg Ser Val Ser His Gly
      260              265              270
Ser Asn His Thr Gln Lys Pro Asp Glu Gln Arg Ser Glu Pro Ser Ala
      275              280              285
Gly Ile Pro Lys Val Thr Ser Arg Cys Ile Asp Ser Lys Glu Pro Ile
      290              295              300
Glu Arg Pro Glu Glu Lys Pro Lys Lys Glu Gly Phe Ile Arg Ser Ser
305              310              315              320
Glu Gly Pro Lys Pro Glu Lys Val Tyr Lys Ser Lys Ser Glu Thr Arg
      325              330              335
Trp Gly Pro Arg Pro Ser Ser Asn Arg Arg Glu Glu Val Asn Asp Arg
      340              345              350
Pro Val Arg Arg Ser Gly Pro Ile Lys Lys Pro Val Leu Arg Asp Met
      355              360              365
Lys Glu Glu Arg Glu Gln Arg Lys Glu Lys Glu Gly Glu Lys Ala Glu
      370              375              380
Lys Val Thr Glu Lys Val Val Val Lys Pro Glu Lys Thr Glu Lys Lys
385              390              395              400
Asp Leu Pro Pro Pro Pro Pro Pro Gln Pro Pro Ala Pro Ile Gln
      405              410              415
Pro Gln Ser Val Pro Pro Pro Ile Gln Pro Glu Ala Glu Lys Phe Pro
      420              425              430
Ser Thr Glu Thr Ala Thr Leu Ala Gln Lys Pro Ser Gln Asp Thr Glu
      435              440              445
Lys Pro Leu Glu Pro Val Ser Thr Val Gln Val Glu Pro Ala Val Lys
      450              455              460
Thr Val Asn Gln Gln Thr Met Ala Ala Pro Val Val Lys Glu Lys Glu
465              470              475              480
Leu Gln Lys Lys Glu Arg Lys Gln Glu Lys Glu Lys Glu Leu Glu Arg
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Gln Lys Glu Lys Glu Lys Glu Leu Gln Lys Lys
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&lt;210&gt; 5617

&lt;211&gt; 3480

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5617

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atttacttga ttttttttaa gttgtatatt taatttgaga ggatttcaca tgaactgtaa  
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<210> 5618

<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

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			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
			35				40					45			
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
	50					55					60				
Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70					75				80	
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
			85					90						95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
		100						105					110		
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
		115					120					125			
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
	130					135					140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150					155				160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
			165					170						175	
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
		180						185					190		
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
	195					200					205				
Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
	210				215						220				
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230					235				240	
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
			245					250						255	
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
		260						265					270		
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
		275					280					285			
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
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Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
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Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
			325					330						335	
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

			340					345					350			
Thr	Arg	Gln	Tyr	Arg	Gln	Glu	Leu	Val	His	Cys	Lys	Trp	Val	Pro	Phe	
		355					360					365				
Leu	Gln	Gln	Lys	Val	Ser	Ile	Pro	Leu	Thr	Glu	Gly	Leu	Asp	Leu	Ile	
	370					375					380					
Ser	Met	Leu	Thr	Asp	Asp	Ala	Thr	Ile	Ala	Ala	Trp	Asn	Asn	Glu	Gly	
385					390					395					400	
Leu	Pro	Ser	Asp	Arg	Met	Ser	Thr	Glu	Asn	Ala	Ala	Ile	Leu	Thr	His	
				405					410						415	
Cys	Glu	Arg	Trp	Pro	Leu	Val	Ile	Asp	Pro	Gln	Gln	Gln	Gly	Ile	Lys	
			420					425					430			
Trp	Ile	Lys	Asn	Lys	Tyr	Gly	Met	Asp	Leu	Lys	Val	Thr	His	Leu	Gly	
	435						440					445				
Gln	Lys	Gly	Phe	Leu	Asn	Ala	Ile	Glu	Thr	Ala	Leu	Ala	Phe	Gly	Asp	
	450					455					460					
Val	Ile	Leu	Ile	Glu	Asn	Leu	Glu	Glu	Thr	Ile	Asp	Pro	Val	Leu	Asp	
465					470					475					480	
Pro	Leu	Leu	Gly	Arg	Asn	Thr	Ile	Lys	Lys	Gly	Lys	Tyr	Ile	Arg	Ile	
				485					490						495	
Gly	Asp	Lys	Glu	Cys	Glu	Phe	Asn	Lys	Asn	Phe	Arg	Leu	Ile	Leu	His	
			500					505					510			
Thr	Lys	Leu	Ala	Asn	Pro	His	Tyr	Lys	Pro	Glu	Leu	Gln	Ala	Gln	Thr	
	515						520					525				
Thr	Leu	Leu	Asn	Phe	Thr	Val	Thr	Glu	Asp	Gly	Leu	Glu	Ala	Gln	Leu	
	530					535					540					
Leu	Ala	Glu	Val	Val	Ser	Ile	Glu	Arg	Pro	Asp	Leu	Glu	Lys	Leu	Lys	
545					550					555					560	
Leu	Val	Leu	Thr	Lys	His	Gln	Asn	Asp	Phe	Lys	Ile	Glu	Leu	Lys	Tyr	
				565					570						575	
Leu	Glu	Asp	Asp	Leu	Leu	Leu	Arg	Leu	Ser	Ala	Ala	Glu	Gly	Ser	Phe	
			580					585					590			
Leu	Asp	Asp	Thr	Lys	Leu	Val	Glu	Arg	Leu	Glu	Ala	Thr	Lys	Thr	Thr	
	595						600					605				
Val	Ala	Glu	Ile	Glu	His	Lys	Val	Ile	Glu	Ala	Lys	Glu	Asn	Glu	Arg	
	610					615					620					
Lys	Ile	Asn	Glu	Ala	Arg	Glu	Cys	Tyr	Arg	Pro	Val	Ala	Ala	Arg	Ala	
625					630					635					640	
Ser	Leu	Leu	Tyr	Phe	Val	Ile	Asn	Asp	Leu	Gln	Lys	Ile	Asn	Pro	Leu	
				645				650						655		
Tyr	Gln	Phe	Ser	Leu	Lys	Ala	Phe	Asn	Val	Leu	Phe	His	Arg	Ala	Ile	
			660					665				670				
Glu	Gln	Ala	Asp	Lys	Val	Glu	Asp	Met	Gln	Gly	Arg	Ile	Ser	Ile	Leu	
		675														

770		775		780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp				
785		790		795
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg				800
	805		810	815
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu				
	820		825	830
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe				
	835		840	845
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly				
	850		855	860
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe				
865		870		875
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln				
	885		890	895
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His				
	900		905	910
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr				
	915		920	925
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr				
	930		935	940
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile				
945		950		955
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro				
	965		970	975
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp				
	980		985	990
Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln				
	995		1000	

&lt;210&gt; 5619

&lt;211&gt; 1219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5619

aagccggaga gctggagctt tgaagccacc ccggtcaaag gatgctgagt ccggagcgcc  
60  
tagccctacc ggactacgag tatctggctc agcgacatgt cctcacctac atggaggatg  
120  
cagtgtgcca gctgctagaa aacaggggaag atattagcca atatggaatt gccaggttct  
180  
tactgaata ttttaacagt gtatgccagg gaacacacat tctctttcga gaattcagct  
240  
tcgtccaagc cccccccac aataggggtat cattttttacg ggccttctgg agatgcttcc  
300  
gaactgtggg caaaaatggc gatttgctga ccatgaaaga atatcactgt ttgctgcaat  
360  
tactgtgtcc tgatttcccg ctggagctca ctgagaaagc agccaggatt gtgctcatgg  
420  
acgatgccat ggactgcttg atgtcttttt cagatttcct ctttgccctc cagatccagt  
480  
tttactactc agaattcctg gacagtgtgg ctgccatcta tgaggacctg ctgtcaggca  
540

agaaccccaa cacagtgatt gtgccgacgt cgtccagtgg gcagcaccgc caacgacctg  
 600  
 ccttggggcgg ggccgggcacg ctggagggcg tggaggcgctc gctgttctac cagtgtctgg  
 660  
 aaaacctgtg tgatcggcac aagtacagct gcccaccccc agcacttgtc aaagaggccc  
 720  
 tcagcaatgt tcagagactg accttctatg gattcctcat ggctctctca aagcacctg  
 780  
 gaatcaacca agccctcggg aagtcagagc taagcagccg tcagcctctc ctgccgcaca  
 840  
 acacagggag cagctggcct ctgttagcaa cacgggtcca gaggggaagg ggcacacca  
 900  
 tctctgcctt gacttcccag ggccggactc aatcccaggg agcaggaata tggcgacaaa  
 960  
 acatggctct tacacattcc catggtaggg gacagccctc cctgcctgca gccctgcccc  
 1020  
 aacatgaaac cacctcccca tagcagaagc gccagcccc tcctcagaga accccagctc  
 1080  
 tgctttgggg agcagcctgc aggtcgggca gacacaggac tatttactca gtgacgctag  
 1140  
 agattatata tcagagagac ctgaatccca ttataaaca aggcaaagggt gtgtctgcgg  
 1200  
 agaccttttt tccaagctg  
 1219

&lt;210&gt; 5620

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5620

Met	Leu	Ser	Pro	Glu	Arg	Leu	Ala	Leu	Pro	Asp	Tyr	Glu	Tyr	Leu	Ala
1				5					10					15	
Gln	Arg	His	Val	Leu	Thr	Tyr	Met	Glu	Asp	Ala	Val	Cys	Gln	Leu	Leu
			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
	35						40					45			
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
	50					55					60				
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65					70					75				80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85					90						95	
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
			100					105						110	
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
		115				120						125			
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
	130					135					140				
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145					150				155					160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165					170						175	
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly





```

          35          40          45
Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
          50          55          60
Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
65          70          75          80
Thr Gly

```

&lt;210&gt; 5623

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5623

```

nctggaagaa ctcgtcatgc tctttgtagc gtggtgcttc tgttgctcac aggacaactt
60
gcctttgatg attttcaaga gagttgtgct atgatgtggc aaaagtatgc aggaagcagg
120
cgggtcaatgc ctctgggagc aaggatcctt ttccacggtg tgttctatgc cgggggcttt
180
gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
240
gtggagcagc tgcagagcca tcccagggca caggaagctc tgggccctcc tctcaacatc
300
cattatctca agctcatcga cagggaaaac ttcgtggaca ttgttgatgc caagttg
357

```

&lt;210&gt; 5624

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5624

```

Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
1          5          10          15
Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
20          25          30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
35          40          45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
50          55          60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
65          70          75          80
Val Asp Ile Val Asp Ala Lys Leu
85

```

&lt;210&gt; 5625

&lt;211&gt; 1017

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5625

```

gccgactcgt ggtacctggc gcttctgggc ttcgctgagc acttccgcac ttccagcccg
60

```

cccaaaatcc gcctgtgcgt gcactgcctg caggccgtgt tccccttcaa gccgccgcag  
 120  
 cgcacgcagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac  
 180  
 agcgagcagg cgcgagacca cctggagaag gcgtgggtga tatcacagca aatcccacag  
 240  
 ttcgaagatg ttaaatttga agcagcaagt ctgttgcttg aattgtactg tcaagagaat  
 300  
 tccgttgatg cagcaaagcc gctgctgcgg aaggcgatcc agatctcaca gcagacccca  
 360  
 tattggcact gccgcctgct cttccagctc gctcaactgc acacgcttga gaaggacctg  
 420  
 gtgtcggcct gtgacctcct ggggttaggg gccgagtacg cccgggtggg gggatctgaa  
 480  
 tacacacggg cgctgttcct cctcagcaag gggatgctgc tgctgatgga gcgaaagctg  
 540  
 caggaggtgc acccgctgct gacctctgc gggcagatcg tggagaactg gcaggggaac  
 600  
 cccatccaga aggagtcgct gcgtgtcttc ttctggtgc tccaggtcac ccactatctg  
 660  
 gatgccgggc aggtgaagag cgtgaagccg tgtctgaagc agctgcagca gtgcatccag  
 720  
 accatctcca cactgcacga tgatgagatc ctgcccagca acccgctga cctcttcac  
 780  
 tggctgcccaggagcacat gtgtgtgctt gtctacctgg tgactgtgat gcactccatg  
 840  
 caggccggct acctggagaa ggcgcagaag tacacggaca aggccctcat gcagctggag  
 900  
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag  
 960  
 cacatcatca tgtgccgcct tgtcacgggt cacaaggcca cggcgctgca ggagatc  
 1017

<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

Ala	Asp	Ser	Trp	Tyr	Leu	Ala	Leu	Leu	Gly	Phe	Ala	Glu	His	Phe	Arg
1				5					10					15	
Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
			35				40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
			50				55				60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70				75					80	
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
				85					90					95	
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100						105					110	
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

115	120	125
Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys		
130	135	140
Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu		
145	150	155
Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met		
165	170	175
Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln		
180	185	190
Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg		
195	200	205
Val Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln		
210	215	220
Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln		
225	230	235
Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala		
245	250	255
Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr		
260	265	270
Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala		
275	280	285
Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met		
290	295	300
Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu		
305	310	315
His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu		
325	330	335
Gln Glu Ile		

&lt;210&gt; 5627

&lt;211&gt; 1401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5627

nctctcacac tgtggaattc tctctatcag cctcaaagtc cagatttgga aagggagtct  
60  
cagcgagggg cagcagctgg cccaaccggg aggcagagcg gcaactgaac tctagccgga  
120  
aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgacctca  
180  
catctgttcc tcgcgcccc gatggcttct gctgcctgct ccatggacct catcgacagc  
240  
tttgagctcc tggatctcct gtttgaccgg caggacggca tcctgagaca cgtggagctg  
300  
ggcgagggct ggggtcacgt caaggaccag gtcttgccaa accccgactc tgacgacttc  
360  
ctcagctcca tcctgggctc tggagactca ctgccagct cccactctg gtcccccgaa  
420  
ggcagtgata gtggcatctc cgaagacctc ccctccgacc cccaggacac ccctccacgc  
480  
agcggaccag ccacctcccc cgccggtgc catctgccc agcctggcaa ggggccctgc  
540

ctctcctatc atcctggcaa ctcttgctcc accacaaccc cagggccagt gatccaacaa  
 600  
 cagcatcacc tgggggcctc ctacctcctg cgacctgggg ctggggcactg tcaggagctg  
 660  
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcacct gccactcag  
 720  
 ctgcccctca ctaagtacga ggagcgagt ctgaaaaaaaa tccgccggaa aatccggaac  
 780  
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctggagact  
 840  
 cggctcctgtt gctgtccttt gccctcatca tcctcccctc catcagccct tttggcccca  
 900  
 acaaaaaccga gagccctggg gactttgcgc ctgtacgagt gttctccaga actttgcaca  
 960  
 acgatgctgc ctcccgcgtg gctgctgatg ctgtgccagg ctccgaggcc ccaggacccc  
 1020  
 gacccgaggc tgacacaacc cgagaagagt ctccaggaag ccccggggca gactggggct  
 1080  
 tccaggacac cgcgaaacctg accaattcga cggaggagct ggacaacgcc accctgggtc  
 1140  
 tgaggaatgc aacagagggg ctggggccagg tcgccctgct ggactgggtg gcgcctgggc  
 1200  
 cgagcactgg ctccaggacgt gcagggtgagg aggcggcggg agacgagctg tgagccccac  
 1260  
 caggactatg ctcccaggcc cctctgcca ggggtgcctt ggggatgctg cactgggcag  
 1320  
 ctaccacact ggggatggga cgtgaggcca agaccccagc agagatgcca gaatggggga  
 1380  
 ggcacagctc atagccacac a  
 1401

&lt;210&gt; 5628

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5628

Met Ala Ser Ala Ala Cys Ser Met Asp Pro Ile Asp Ser Phe Glu Leu  
 1 5 10 15  
 Leu Asp Leu Leu Phe Asp Arg Gln Asp Gly Ile Leu Arg His Val Glu  
 20 25 30  
 Leu Gly Glu Gly Trp Gly His Val Lys Asp Gln Val Leu Pro Asn Pro  
 35 40 45  
 Asp Ser Asp Asp Phe Leu Ser Ser Ile Leu Gly Ser Gly Asp Ser Leu  
 50 55 60  
 Pro Ser Ser Pro Leu Trp Ser Pro Glu Gly Ser Asp Ser Gly Ile Ser  
 65 70 75 80  
 Glu Asp Leu Pro Ser Asp Pro Gln Asp Thr Pro Pro Arg Ser Gly Pro  
 85 90 95  
 Ala Thr Ser Pro Ala Gly Cys His Pro Ala Gln Pro Gly Lys Gly Pro  
 100 105 110  
 Cys Leu Ser Tyr His Pro Gly Asn Ser Cys Ser Thr Thr Thr Pro Gly  
 115 120 125  
 Pro Val Ile Gln Gln Gln His His Leu Gly Ala Ser Tyr Leu Leu Arg

130 135 140  
 Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys  
 145 150 155 160  
 Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu  
 165 170 175  
 Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg  
 180 185 190  
 Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile  
 195 200 205  
 Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser  
 210 215 220  
 Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly  
 225 230 235 240  
 Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu  
 245 250 255  
 Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp  
 260 265 270  
 Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro  
 275 280 285  
 Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr  
 290 295

&lt;210&gt; 5629

&lt;211&gt; 428

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5629

gtgcacgacc ccactgaatc atcccacaac catggatggg agacacactc agtctccttt  
 60  
 aacagaagat aaagctgggg cttacagaga atgtacaact tggcccaggg cacaccagtt  
 120  
 agccatcagg ggcagngctg ctattcaggt ctgggactgt gggactccag agcccatggt  
 180  
 ttttacgagg atgccatact gccacaatgg atggtgtctt tatctcctga tatatgattg  
 240  
 tgtgttgga ggcgtggggg ggcagctgga agaattggaga ggcataattg tggaggatct  
 300  
 tccccattc tctgctaccc tctcttggag ctcccagttc catctgagaa attatctact  
 360  
 ctgagaaatc gtcacaacac agcatgggtg tgagtgcagt ggcagaagcc tgtgcctggt  
 420  
 tgtatggg  
 428

&lt;210&gt; 5630

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5630

Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly  
 1 5 10 15  
 Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

	20		25		30
Arg Gly Xaa Ala Ala Ile Gln Val Trp Asp Cys Gly Thr Pro Glu Pro					
35		40		45	
Met Phe Phe Thr Arg Met Pro Tyr Cys His Asn Gly Trp Cys Leu Tyr					
50		55		60	
Leu Leu Ile Tyr Asp Cys Val Leu Gly Gly Val Gly Trp Gln Leu Glu					
65		70		75	
Glu Trp Arg Gly Ile Phe Val Glu Asp Leu Pro Pro Phe Ser Ala Thr					
	85		90		95
Leu Ser Trp Ser Ser Gln Phe His Leu Arg Asn Tyr Leu Leu					
100		105		110	

&lt;210&gt; 5631

&lt;211&gt; 783

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5631

acgcgtgccc agcacatgtg tgcacacgca gatgcaggag agaacacaca ccaccgtctc  
60  
tttgcacacg tgtgccccctg tccggccccg ggggctcatc tctccttcac ggagagaatt  
120  
ctttttatta cgagtgaaca gatgaactaa ggtaagcggg tctcagcctt ccgctgggtgc  
180  
agcatctcca cgcagggcct cagccccgtc ctggccttgc ctgaggactg caccatgggt  
240  
gttccttggg catggaggag gcagcaggaa ggggtgacag gagcaggagc aggtgcaggg  
300  
cacctcacac cacaggcctc cccacctct gagctgcaa cagccaagac tcctggcgag  
360  
gccgggagag gaggggtgag agggaaggag ggtctctgtg aaagcaagcc ccacccccag  
420  
agcagagcag agaccaggt ctgcaaatca caccctcccc ccacgagttc ctcctttgag  
480  
gccagcagca cccgagggag ggcaggggct gcacagagac cagagaaagg aaaacccac  
540  
agaagaaaac tcaaagcatc agtcccatgc gtgtctgctg aacgagtga tgggccccaa  
600  
ggctcttctc taaaaacggc acgcatccat cgcacagggg gccacaggac acggccgggg  
660  
ccgtctgcgt ctgtgcctgt gcagcccaca ccagtgcagc ccggggccct ctcagacctc  
720  
accacacgcg tgcccagcac atgtgtgcac acgcagatgc aggagagaac acacaccacc  
780  
gtc  
783

&lt;210&gt; 5632

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5632

Met Gly Val Pro Trp Ala Trp Arg Arg Gln Gln Glu Gly Val Thr Gly

```

      1           5           10           15
Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser
      20           25           30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
      35           40           45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
      50           55           60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Pro Thr Ser Ser Ser
      65           70           75           80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
      85           90           95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
      100          105          110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
      115          120          125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
      130          135          140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
      145          150          155          160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln
      165          170          175
Glu Arg Thr His Thr Thr Val
      180

```

&lt;210&gt; 5633

&lt;211&gt; 2181

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5633

```

gccaatgtcc ctgtggccac tcagctgaga ccgagggcga cctgggcagc tgcgggtgtc
60
tgtcacctcc gtgtcccaca tagatgccag gctctgcttc tgtgggtctg gaggtcatta
120
gtcaattgta tgtgggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa
180
tgagcgggtt ctgagtgtg gggccgctgg tctgtctctgc ctggtgggat tctccagtgc
240
tggcttcac tgtgccccag cccactctc accaacaagg agggcgtgaa aatgacaagg
300
aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg
360
gccctgtgtg agctgtctgt ctgaggaagc cccaggctga ggtagctacc aggcggaggc
420
tgggtttgga ggcctccaca tcagggaatt gagcggtagg ggtttcagcc ttcacgttgg
480
tcgccgact gtatgggaag tgggtcttgg ggtctgcttg ccagttctca ccgtcctctt
540
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&lt;210&gt; 5634

&lt;211&gt; 289

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 5634

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20           25           30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
275          280          285
Glu

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&lt;210&gt; 5635

&lt;211&gt; 614

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5635

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180

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 614

&lt;210&gt; 5636

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5636

Xaa	Val	Lys	Asp	Val	Ala	Glu	Val	Phe	Gln	Lys	Trp	Leu	Lys	Ile	Glu
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Gly	Lys	Lys	Cys	His	Cys	Leu	Ser	Glu	Lys	Thr	Lys	Gln	Asn	Met	Gly
			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
			35				40					45			
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
	50					55				60					
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
65					70				75					80	
His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
				85				90					95		
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
		100					105					110			
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
	115					120					125				
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
	130					135					140				
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
145					150				155					160	
Asp	Thr	Pro	Cys	Asp	Cys	Ala	Glu	Lys	Gln	His	His	Lys	Asp	Leu	Ala
			165				170					175			
Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu
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Glu	Ile	Glu	Ala	Glu	Tyr	Ala	Ala	Leu	Asp	Lys	Arg				
	195					200									

&lt;210&gt; 5637

&lt;211&gt; 825

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5637

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 825

&lt;210&gt; 5638

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5638

Met	Pro	Cys	Gly	Asn	Arg	Ser	Gln	Asp	Pro	Val	Glu	Asn	Pro	Arg	Cys
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Leu	Asn	Ile	Asn	Lys	Ser	Asp	Ser	His	Ser	Pro	Thr	Val	Leu	Ala	Ser
			20					25					30		
Leu	Thr	Gly	Ala	Arg	Trp	Phe	Cys	Asp	Pro	Ser	Gln	Ala	His	Ala	Pro
		35					40					45			
Leu	Ala	Gly	Arg	Leu	Ala	Arg	Ala	Pro	Leu	Trp	Leu	Ala	Cys	Gly	Asp
		50				55					60				
Thr	Trp	Ala	Leu	Leu	His	Val	Pro	Thr	Arg	Ala	Val	Ala	Gly	Ser	Lys
		65			70				75					80	
Glu	Ala	Gln	Pro	Arg	Pro	Ala	Cys	Val	Asp	Pro	Ala	Gly	Leu	Arg	Ala
			85						90				95		
Pro	Glu	Leu	Leu	Thr	Val	Ser	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Arg	Arg
			100					105					110		
Pro	Pro	Ser	Ser	Cys	Pro	Ala	Trp	Asp	Pro	Ser	Ala	Val	Cys	Leu	Leu
		115					120						125		
Asn	Gln	Gly	Val												

130

&lt;210&gt; 5639

&lt;211&gt; 2433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5639

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240  
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300  
gcatgaccg gcctgaagta gggcggaac ggaagtgcgt tgtgtatgaa cgcagcggcg  
360  
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 2433

&lt;210&gt; 5640

&lt;211&gt; 540

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5640

Met	Cys	Pro	Ser	Pro	Glu	Arg	Gln	Glu	Asp	Gly	Ala	Arg	Lys	Asp	Phe
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Ser	Ser	Arg	Leu	Ala	Ala	Gly	Pro	Thr	Phe	Gln	His	Phe	Leu	Lys	Ser
			20					25					30		
Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
			35				40					45			
Pro	Tyr	Leu	Met	Met	Asp	Glu	Leu	Leu	Gly	Arg	Gln	Arg	Lys	Val	Tyr
			50			55				60					
Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
65				70						75				80	
Trp	Ser	Ile	Leu	Gln	Lys	Ser	Gly	Tyr	Leu	Arg	Pro	Val	Thr	Ser	Lys

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 Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu  
 100 105 110  
 Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg  
 115 120 125  
 Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met  
 130 135 140  
 Ala Glu Arg Leu Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp  
 145 150 155 160  
 Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala  
 165 170 175  
 Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp  
 180 185 190  
 Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr  
 195 200 205  
 Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr  
 210 215 220  
 Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala  
 225 230 235 240  
 Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu  
 245 250 255  
 Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu  
 260 265 270  
 Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr  
 275 280 285  
 Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu  
 290 295 300  
 Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser  
 305 310 315 320  
 Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu  
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 355 360 365  
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 370 375 380  
 Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His  
 385 390 395 400  
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 405 410 415  
 Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu  
 420 425 430  
 Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu  
 435 440 445  
 Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val  
 450 455 460  
 Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala  
 465 470 475 480  
 Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro  
 485 490 495  
 Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala  
 500 505 510  
 Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu

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 <211> 293  
 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

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 Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu  
 35 40 45  
 Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp  
 50 55 60  
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<210> 5643  
 <211> 1218  
 <212> DNA  
 <213> Homo sapiens

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 180  
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&lt;210&gt; 5644

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5644

Trp	Glu	Gln	Asp	Phe	Gly	His	Pro	Val	Ser	Gln	Glu	Ser	Ser	Trp	Ser
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Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35					40					45			
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
	50					55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70					75				80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
				85					90					95	
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile



```

          100              105              110
Pro Thr Val Asn Arg Ile Thr Pro Lys Thr Gln Gly Thr Asn Gln Ile
          115              120              125
Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
          130              135              140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
145              150              155              160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
          165              170              175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
          180              185              190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
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<210> 5645  
 <211> 156  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 156

<210> 5646  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

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<400> 5646
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Ala Gln Arg Cys Pro Gln Ile Ser Phe Pro Ser Pro Arg Gln Glu Asp
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          35              40              45
Val Tyr His Ala
          50

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<210> 5647  
 <211> 150  
 <212> DNA  
 <213> Homo sapiens

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 aagggagaac ccggcttacc cggccatccn  
 150

<210> 5648  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 5648  
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 Phe Phe Pro Gly Arg Pro Lys Gly Glu Pro Gly Ile Pro Ala Ile Pro  
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 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly  
 35 40 45  
 His Pro  
 50

<210> 5649  
 <211> 345  
 <212> DNA  
 <213> Homo sapiens

<400> 5649  
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 aaccgcctgg tccctcggat cgcgcccagc ccagactcgg actcggacac agactcggag  
 120  
 gacccgagtc tccggcgcag cgcgggcggc ttgctcgcgt cgcagggtcat ccacagcggg  
 180  
 cacttcattg tgctgctgcc gcacagcgac tcgctgcccc ggcggcgcga ccaggagggt  
 240  
 ccgtggggcc ctccgacttc gggccgcgca gtatcgaccc cacactcaca cgctcttcg  
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 agtgcttgag cctggcctac agtggcaagc tggggctctcc caagt  
 345

<210> 5650  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 5650  
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 20 25 30  
 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser  
 35 40 45  
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg  
 50 55 60  
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His  
 65 70 75 80  
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala  
 85 90 95  
 Gly Val Ser Gln

100

&lt;210&gt; 5651

&lt;211&gt; 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5651

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ggagaagtgg cgtcgagtcg ggccgggcag tagaggaaat tgcggtagtg accctcgggc  
120  
ctcgccatga agagccgctt tagcaccatt gacctccgcg ccgtactcgc ggagctgaat  
180  
gctagcttgc taggaatgag agtaaacaat gtttatgatg tggataataa gacatacctt  
240  
attcgtcttc aaaaaccgga ctttaaagct acacttttac ttgaatctgg catacaaatt  
300  
catacaacag aatttgagtgc gcctaagaat atgatgccgt ctagttttgc catgaagtgc  
360  
cgaaaacatt tgaagagtcg gagattagtc agtgcaaaac agcttggtgt ggatagaatt  
420  
gtagattttc aatttggaag tgatgaagct gcttaccatt taatcattga gctctatgat  
480  
agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aaggtttcga  
540  
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600  
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615

&lt;210&gt; 5652

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5652

Met	Lys	Ser	Arg	Phe	Ser	Thr	Ile	Asp	Leu	Arg	Ala	Val	Leu	Ala	Glu
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Leu	Asn	Ala	Ser	Leu	Leu	Gly	Met	Arg	Val	Asn	Asn	Val	Tyr	Asp	Val
		20						25					30		
Asp	Asn	Lys	Thr	Tyr	Leu	Ile	Arg	Leu	Gln	Lys	Pro	Asp	Phe	Lys	Ala
		35					40					45			
Thr	Leu	Leu	Leu	Glu	Ser	Gly	Ile	Gln	Ile	His	Thr	Thr	Glu	Phe	Glu
		50				55					60				
Trp	Pro	Lys	Asn	Met	Met	Pro	Ser	Ser	Phe	Ala	Met	Lys	Cys	Arg	Lys
65				70					75					80	
His	Leu	Lys	Ser	Arg	Arg	Leu	Val	Ser	Ala	Lys	Gln	Leu	Gly	Val	Asp
			85					90					95		
Arg	Ile	Val	Asp	Phe	Gln	Phe	Gly	Ser	Asp	Glu	Ala	Ala	Tyr	His	Leu
		100					105						110		
Ile	Ile	Glu	Leu	Tyr	Asp	Arg	Gly	Asn	Ile	Val	Leu	Thr	Asp	Tyr	Glu
		115				120						125			
Tyr	Val	Ile	Leu	Asn	Ile	Leu	Arg	Phe	Arg	Thr	Asp	Glu	Ala	Asp	Asp

130	135	140
Val Lys Phe Ala Val Arg Glu Arg Tyr Pro Leu Asp His Ala Arg Ala		
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Ala Glu Pro		160

<210> 5653  
 <211> 1439  
 <212> DNA  
 <213> Homo sapiens

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 cacttaacca atgccttctg gtactgccat tctttttttt ttttttcaag tattggaagg  
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 1439

<210> 5654  
 <211> 245  
 <212> PRT  
 <213> Homo sapiens

<400> 5654  
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 20 25 30  
 Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp  
 35 40 45  
 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala  
 50 55 60  
 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu  
 65 70 75 80  
 Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro  
 85 90 95  
 Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Gly  
 100 105 110  
 Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr  
 115 120 125  
 His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu  
 130 135 140  
 Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys  
 145 150 155 160  
 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala  
 165 170 175  
 Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe  
 180 185 190  
 Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu  
 195 200 205  
 Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr  
 210 215 220  
 Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe  
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 Leu Leu Phe Pro Asp  
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<210> 5655  
 <211> 3810  
 <212> DNA  
 <213> Homo sapiens

<400> 5655  
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180  
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2340  
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 3810

&lt;210&gt; 5656

&lt;211&gt; 987

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5656

Asp	Leu	Leu	Glu	Glu	Asp	Glu	Leu	Leu	Glu	Gln	Lys	Phe	Gln	Glu	Ala
1			5						10					15	
Val	Gly	Gln	Ala	Gly	Xaa	Pro	Ser	Pro	Ser	Xaa	Ser	Lys	Ala	Glu	Leu
			20					25					30		
Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu	Lys
		35					40					45			
Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
	50					55					60				
Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
65				70					75					80	
Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
			85					90						95	
Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
		100						105					110		
Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
	115					120						125			
Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe	Glu
	130					135					140				
Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln	Asn
145				150					155					160	
Leu	Ala	Ala	Gln	Asp	Arg	Val	Leu	Cys	Ala	Leu	Thr	Glu	Ala	Asn	Val
			165					170						175	
Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
		180					185						190		
Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu	Asp
	195						200					205			
Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu	Glu
	210					215					220				
Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala



225				230					235				240
Arg	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Asp	Arg	Glu	Leu	Lys
				245					250				255
Pro	Pro	Pro	Arg	Pro	Thr	Ala	Pro	Lys	Pro	Leu	Leu	Pro	Arg
				260					265				270
Glu	Ser	Glu	Ala	Val	Glu	Ala	Gly	Asp	Pro	Pro	Glu	Glu	Leu
				275					280				285
Leu	Pro	Pro	Asp	Met	Val	Ala	Gly	Pro	Arg	Leu	Pro	Asp	Thr
				290					295				300
Gly	Ser	Ala	Thr	Pro	Leu	His	Phe	Pro	Pro	Ser	Pro	Phe	Pro
				305					310				315
Thr	Gly	Pro	Gly	Pro	His	Tyr	Leu	Ser	Gly	Pro	Leu	Pro	Pro
				325					330				335
Tyr	Ser	Gly	Pro	Thr	Gln	Leu	Ile	Gln	Pro	Arg	Ala	Pro	Gly
				340					345				350
Ala	Met	Pro	Val	Ala	Pro	Gly	Pro	Ala	Leu	Tyr	Pro	Ala	Pro
				355					360				365
Thr	Pro	Glu	Leu	Gly	Leu	Val	Pro	Arg	Ser	Ser	Pro	Gln	His
				370					375				380
Val	Ser	Ser	Pro	Tyr	Val	Gly	Val	Gly	Pro	Ala	Pro	Pro	Val
				385					390				395
Leu	Pro	Ser	Ala	Pro	Pro	Pro	Gln	Phe	Ser	Gly	Pro	Glu	Leu
				405					410				415
Ala	Val	Arg	Pro	Ala	Thr	Thr	Thr	Val	Asp	Ser	Ile	Gln	Ala
				420					425				430
Pro	Ser	His	Thr	Ala	Pro	Arg	Pro	Asn	Pro	Thr	Pro	Ala	Pro
				435					440				445
Pro	Cys	Phe	Pro	Val	Pro	Pro	Gln	Pro	Leu	Pro	Thr	Pro	Tyr
				450					455				460
Tyr	Pro	Ala	Gly	Ala	Lys	Gln	Pro	Ile	Pro	Ala	Gln	His	His
				465					470				475
Ser	Gly	Ile	Pro	Thr	Gly	Phe	Pro	Ala	Pro	Arg	Ile	Gly	Pro
				485					490				495
Gln	Pro	His	Pro	Gln	Pro	His	Pro	Ser	Gln	Ala	Phe	Gly	Pro
				500					505				510
Pro	Gln	Gln	Pro	Leu	Pro	Leu	Gln	His	Pro	His	Leu	Phe	Pro
				515					520				525
Ala	Pro	Gly	Leu	Leu	Pro	Pro	Gln	Ser	Pro	Tyr	Pro	Tyr	Ala
				530					535				540
Pro	Gly	Val	Leu	Gly	Gln	Pro	Pro	Pro	Pro	Leu	His	Thr	Gln
				545					550				555
Pro	Gly	Pro	Ala	Gln	Asp	Pro	Leu	Pro	Ala	His	Ser	Gly	Ala
				565					570				575
Phe	Pro	Ser	Pro	Gly	Pro	Pro	Gln	Pro	Pro	His	Pro	Pro	Leu
				580					585				590
Gly	Pro	Ala	Pro	Ser	Thr	Arg	Pro	Met	Gly	Pro	Gln	Ala	Ala
				595					600				605
Thr	Ile	Arg	Gly	Pro	Ser	Ser	Ala	Gly	Gln	Ser	Thr	Pro	Ser
				610					615				620
Leu	Val	Pro	Ser	Pro	Ala	Pro	Ser	Pro	Gly	Pro	Gly	Pro	Val
				625					630				635
Arg	Pro	Pro	Ala	Ala	Glu	Pro	Pro	Pro	Cys	Leu	Arg	Arg	Gly
				645					650				655
Ala	Ala	Asp	Leu	Leu	Ser	Ser	Ser	Pro	Glu	Ser	Gln	His	Gly
													Gly

660 665 670  
 Gln Ser Pro Gly Gly Gly Gln Pro Leu Leu Gln Pro Thr Lys Val Asp  
 675 680 685  
 Ala Ala Glu Gly Arg Arg Pro Gln Ala Leu Arg Leu Ile Glu Arg Asp  
 690 695 700  
 Pro Tyr Glu His Pro Glu Arg Leu Arg Gln Leu Gln Gln Glu Leu Glu  
 705 710 715 720  
 Ala Phe Arg Gly Gln Leu Gly Asp Val Gly Ala Leu Asp Thr Val Trp  
 725 730 735  
 Arg Glu Leu Gln Asp Ala Gln Glu His Asp Ala Arg Gly Arg Ser Ile  
 740 745 750  
 Ala Ile Ala Arg Cys Tyr Ser Leu Lys Asn Arg His Gln Asp Val Met  
 755 760 765  
 Pro Tyr Asp Ser Asn Arg Val Val Leu Arg Ser Gly Lys Asp Asp Tyr  
 770 775 780  
 Ile Asn Ala Ser Cys Val Glu Gly Leu Ser Pro Tyr Cys Pro Pro Leu  
 785 790 795 800  
 Val Ala Thr Gln Ala Pro Leu Pro Gly Thr Ala Ala Asp Phe Trp Leu  
 805 810 815  
 Met Val His Glu Gln Lys Val Ser Val Ile Val Met Leu Val Ser Glu  
 820 825 830  
 Ala Glu Met Glu Lys Gln Lys Val Ala Arg Tyr Phe Pro Thr Glu Arg  
 835 840 845  
 Gly Gln Pro Met Val His Gly Ala Leu Ser Leu Ala Leu Ser Ser Val  
 850 855 860  
 Arg Ser Thr Glu Thr His Val Glu Arg Val Leu Ser Leu Gln Phe Arg  
 865 870 875 880  
 Asp Gln Ser Leu Lys Arg Ser Leu Val His Leu His Phe Pro Thr Trp  
 885 890 895  
 Pro Glu Leu Gly Leu Pro Asp Ser Pro Ser Asn Leu Leu Arg Phe Ile  
 900 905 910  
 Gln Glu Val His Ala His Tyr Leu His Gln Arg Pro Leu His Thr Pro  
 915 920 925  
 Ile Ile Val His Cys Ser Ser Gly Val Gly Arg Thr Gly Ala Phe Ala  
 930 935 940  
 Leu Leu Tyr Ala Ala Val Gln Glu Val Glu Ala Gly Asn Gly Ile Pro  
 945 950 955 960  
 Glu Leu Pro Gln Leu Val Arg Arg Met Arg Gln Gln Arg Lys His Met  
 965 970 975  
 Leu Gln Glu Lys Leu His Leu Arg Xaa Leu Leu  
 980 985

&lt;210&gt; 5657

&lt;211&gt; 1020

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5657

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ggcaagaact gcaccgcagg cgccgtctac acctaccacg agaagaagaa ggacacagcg  
 120

gcctcgggct atgggaccca gaacattcga ctgagccggg atgccgtgaa ggacttcgac  
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tgctgttgtc tctccctgca gccttgccac gatcctgttg tcaccccaga tggctacctg  
 240  
 tatgagcgtg aggccatcct ggagtagatt ctgcaccaga agaaggagat tgcccggcag  
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 420  
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 780  
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 840  
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 1020

&lt;210&gt; 5658

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5658

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		20						25					30		
Ile	Arg	Leu	Ser	Arg	Asp	Ala	Val	Lys	Asp	Phe	Asp	Cys	Cys	Cys	Leu
		35					40					45			
Ser	Leu	Gln	Pro	Cys	His	Asp	Pro	Val	Val	Thr	Pro	Asp	Gly	Tyr	Leu
	50					55					60				
Tyr	Glu	Arg	Glu	Ala	Ile	Leu	Glu	Tyr	Ile	Leu	His	Gln	Lys	Lys	Glu
65					70					75				80	
Ile	Ala	Arg	Gln	Met	Lys	Ala	Tyr	Glu	Lys	Gln	Arg	Gly	Thr	Arg	Arg
			85						90					95	
Glu	Glu	Gln	Lys	Glu	Leu	Gln	Arg	Ala	Ala	Ser	Gln	Asp	His	Val	Arg
		100						105					110		
Gly	Phe	Leu	Glu	Lys	Glu	Ser	Ala	Ile	Val	Ser	Arg	Pro	Leu	Asn	Pro
	115						120					125			
Phe	Thr	Ala	Lys	Ala	Leu	Ser	Gly	Thr	Ser	Pro	Asp	Asp	Val	Gln	Pro
	130						135				140				
Gly	Pro	Ser	Val	Gly	Pro	Pro	Ser	Lys	Asp	Lys	Asp	Lys	Val	Leu	Pro

145		150		155		160
Ser Phe Trp Ile Pro Ser Leu Thr Pro Glu Ala Lys Ala Thr Lys Leu						
	165		170		175	
Glu Lys Pro Ser Arg Thr Val Thr Cys Pro Met Ser Gly Lys Pro Leu						
	180		185		190	
Arg Met Ser Asp Leu Thr Pro Val His Phe Thr Pro Leu Asp Ser Ser						
	195		200		205	
Val Asp Arg Val Gly Leu Ile Thr Arg Ser Glu Arg Tyr Val Cys Ala						
	210		215		220	
Val Thr Arg Asp Ser Leu Ser Asn Ala Thr Pro Cys Ala Val Leu Arg						
	225		230		235	
Pro Ser Gly Ala Val Val Thr Leu Glu Cys Val Glu Lys Leu Ile Arg						
	245		250		255	
Lys Asp Met Val Asp Pro Val Thr Gly Asp Lys Leu Thr Asp Arg Asp						
	260		265		270	
Ile Ile Val Leu Gln Arg Gly Gly Thr Gly Phe Ala Gly Ser Gly Val						
	275		280		285	
Lys Leu Gln Ala Glu Lys Ser Arg Pro Val Met Gln Ala						
	290		295		300	

&lt;210&gt; 5659

&lt;211&gt; 1263

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5659

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180
atttttctct tctgttttca ggtcacatgt gccaatttaa cgaacgggtg aaagtcagaa
240
cttctgaaat caggaagcag caaatccaca ctaaagcaca tatggacaga aagcagcaaa
300
gacttgtcta tcagccgact cctgtcacag acttttcgtg gcaaagagaa tgatacagat
360
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420
aggaactcca cagaccttca agagcctcgg cccagggccca agagaaggcc cattgttaaa
480
acgggcaagt ttaagaaaat gtttggtatg ggcgattttc attccaacat caaaacagtg
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720
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780
tatgaccctt caaaaacctg ttaccaggag caaacccaaa gtcatgtatc ctggtctctg
840

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 960  
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 1080  
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 1260  
 att  
 1263

<210> 5660  
 <211> 253  
 <212> PRT  
 <213> Homo sapiens

<400> 5660  
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 Lys Asp Leu Ser Ile Ser Arg Leu Leu Ser Gln Thr Phe Arg Gly Lys  
 35 40 45  
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr  
 50 55 60  
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln  
 65 70 75 80  
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys  
 85 90 95  
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr  
 100 105 110  
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn  
 115 120 125  
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn  
 130 135 140  
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu  
 145 150 155 160  
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys  
 165 170 175  
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys  
 180 185 190  
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His  
 195 200 205  
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile  
 210 215 220  
 Ser Phe Tyr Ser Thr Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp  
 225 230 235 240  
 Tyr Asn Tyr His Ser Asp Thr Pro Tyr Phe Pro Ser Gly

245

250

<210> 5661  
 <211> 578  
 <212> DNA  
 <213> Homo sapiens

<400> 5661  
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 120  
 ataaccagtc gcacggcaag gaccagcag gaagcaccag ccactggccc cgacctcccg  
 180  
 caccaggac ctgacgggca cttagacaca cacagtggcc tgagctccaa ctccagcatg  
 240  
 accacgcggg agcttcagca gtactggcag aaccagaaat gccgctggaa gcacgtcaaa  
 300  
 ctgctctttg agatcgcttc agctcgcatc gaggagagaa aagtctctaa gtttgtgatg  
 360  
 gggaaatcaa ggctggaga gatgacttat ccagggtcac gtggcgagac agggacagca  
 420  
 ccagaaccag acccgagatg tccacgtcaa agtgacatgc tctgagaggc agcacacaca  
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<210> 5662  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 5662  
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 Cys Leu Gly Ala Cys Lys Ser Arg Ala Pro Trp Glu Pro Trp Cys Met  
 20 25 30  
 Gly Pro Ile Thr Gln Cys Thr Ala Arg Thr Gln Gln Glu Ala Pro Ala  
 35 40 45  
 Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr  
 50 55 60  
 His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln  
 65 70 75 80  
 Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu  
 85 90 95  
 Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe  
 100 105 110  
 Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg  
 115 120 125  
 Gly Glu Thr Gly Thr Ala Pro Glu Pro Asp Pro Arg Cys Pro Arg Gln  
 130 135 140  
 Ser Asp Met Leu

145

&lt;210&gt; 5663

&lt;211&gt; 857

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5663

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 120  
 agacaggagg ctgccgtggt caagaagggc caagccttga agtctcacgg caccctctgt  
 180  
 ggtggaggta taaggctcag gggccaacta ctgggtcttg cagtcccat cgttgctgtg  
 240  
 ggctgtcttc acctcttcta gttccttctg tagctcagac tcggccacca caacctcctt  
 300  
 tggcttctgg taagagatga tcagggtgca gttggcgtgg gcaaagctca gcaaggcgtc  
 360  
 atccagaggt agctggtgtc tatctagatc aggaatggag aacttcttgt agtacttctt  
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 660  
 acgccacttt ctcaacaagta gttcactcgt cttctcgtca tattcttcag ccatttcctt  
 720  
 gccgtctggg aataaatagt gaaccttcct tctcccgctc tgcagcagcg cagtcttctg  
 780  
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 857

&lt;210&gt; 5664

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5664

Met Ala Val Thr Gly Trp Leu Glu Ser Leu Arg Thr Ala Gln Lys Thr  
 1 5 10 15  
 Ala Leu Leu Gln Asp Gly Arg Arg Lys Val His Tyr Leu Phe Pro Asp  
 20 25 30  
 Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu  
 35 40 45  
 Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp  
 50 55 60  
 Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

```

65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
          85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
          100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165          170          175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180          185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
          195          200

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<210> 5665  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

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 120  
 cagcggccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgctgc tggacagagc  
 180  
 atgatggggg ctgcaagggc tccctcaaac cctggactcc tccaacagag ggctcctggg  
 240  
 tgccaggctc agctctgccc tgcgtcggcc ccagggcgta gggaggggtg ttaatcctgg  
 300  
 cccgggcctt ccccgaggt ggagcgcgtg tcgcaccgc tgctgcagca gcagtatgag  
 360  
 ctgtaccggg agcgcttgc gtagcgatgc gagcggcgcc cggtggagca ggtgctgtac  
 420  
 cacggcacga cggcaccggc agtgcctgac atctgcgccc acggcttcaa ccgcagcttc  
 480  
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 531

<210> 5666  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 5666  
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 20 25 30  
 Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro



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          35          40          45
Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly
      50          55          60
Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg
65          70          75

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<210> 5667  
 <211> 858  
 <212> DNA  
 <213> Homo sapiens

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<400> 5667
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120
tttgagaagt taagaatgat ttccaaggaa atccgccaag ttgttcgaat gacttctgct
180
aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaaattca
240
aacatgctgg atgttcaggg aggtgctcac aaaaaaaggg cacgccgcag ctctctgctt
300
aatgccaaaga agctatatga ggatgccccaa atggcaagga aggtgaagca gtatctttcc
360
agtctcgatg tagagacaga tgaggagaag ttccagatga tgtcattaca gntggagcct
420
gcatatggta cctgtgagta caagttttca tttatgtgac gctaaagagc acaacaaaat
480
aaaaacttat ttctctagaa ttatacctaa gtcccaagaa aattaacttt cactcacaaa
540
agattgctgg cataccttaa gcatcatgtg atccaattaa tcacagactg aatcccatcc
600
attcctgatg gctacactat ccaaaaaata gagggataag tagatcttta aaaagctttt
660
taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa catttttata
720
ttcatcccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata
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858

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<210> 5668  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

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<400> 5668
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          20          25          30
Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

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[illegible]

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<210> 5669
<211> 1842
<212> DNA
<213> Homo sapiens
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<400> 5669					
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120					
gccatgatgc	gcagctccat	agagaggggc	aaatgggtct	tcttccagaa	ctgccacctg
180					
gcaccaagct	ggatgccagc	cctagaacgc	ctcatcgagc	acatcaaccc	cgacaaggta
240					
cacagggact	tccgcctctg	gctcaccagc	ctgcccagca	acaagttccc	agtgtccatc
300					
ctgcagaacg	gctccaagat	gaccattgag	ccgccacgcg	gtgtcagggc	caacctgctg
360					
aagtcctata	gtagccttgg	tgaagacttc	ctcaactcct	gccacaaggt	gatggagttc
420					
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660					
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720					
gcctcgggca	tctaccacca	gatcccgctt	acctacgacc	tccacggcta	cctctcctac
780					
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840					
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900					
aaatcatctt	ctgcaggcag	ccaggggccg	gaggagatag	tggaggacgt	cacccaaaac
960					

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 1080  
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 1380  
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 1680  
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 1740  
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&lt;210&gt; 5670

&lt;211&gt; 591

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5670

Phe	Val	Leu	Ser	Pro	Gly	Thr	Asp	Pro	Ala	Ala	Asp	Leu	Tyr	Lys	Phe
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Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
		20						25				30			
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40					45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
		50				55					60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65					70					75				80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85					90					95		
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
			100					105					110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
		115				120							125		
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

	130						135						140					
Leu	Ser	Leu	Cys	Leu	Phe	His	Gly	Asn	Ala	Leu	Glu	Arg	Arg	Lys	Phe			
145					150					155					160			
Gly	Pro	Leu	Gly	Phe	Asn	Ile	Pro	Tyr	Glu	Phe	Thr	Asp	Gly	Asp	Leu			
				165					170					175				
Arg	Ile	Cys	Ile	Ser	Gln	Leu	Lys	Met	Phe	Leu	Asp	Glu	Tyr	Asp	Asp			
			180					185					190					
Ile	Pro	Tyr	Lys	Val	Leu	Lys	Tyr	Thr	Ala	Gly	Glu	Ile	Asn	Tyr	Gly			
		195					200					205						
Gly	Arg	Val	Thr	Asp	Asp	Trp	Asp	Arg	Arg	Cys	Ile	Met	Asn	Ile	Leu			
	210				215					220								
Glu	Asp	Phe	Tyr	Asn	Pro	Asp	Val	Leu	Ser	Pro	Glu	His	Ser	Tyr	Ser			
225				230					235						240			
Ala	Ser	Gly	Ile	Tyr	His	Gln	Ile	Pro	Pro	Thr	Tyr	Asp	Leu	His	Gly			
			245					250					255					
Tyr	Leu	Ser	Tyr	Ile	Lys	Ser	Leu	Pro	Leu	Asn	Asp	Met	Pro	Glu	Ile			
			260				265						270					
Phe	Gly	Leu	His	Asp	Asn	Ala	Asn	Ile	Thr	Phe	Ala	Gln	Asn	Glu	Thr			
	275				280							285						
Phe	Ala	Leu	Leu	Gly	Thr	Ile	Ile	Gln	Leu	Gln	Pro	Lys	Ser	Ser	Ser			
	290				295					300								
Ala	Gly	Ser	Gln	Gly	Arg	Glu	Glu	Ile	Val	Glu	Asp	Val	Thr	Gln	Asn			
305				310						315					320			
Ile	Leu	Leu	Lys	Val	Pro	Glu	Pro	Ile	Asn	Leu	Gln	Trp	Val	Met	Ala			
			325					330						335				
Lys	Tyr	Pro	Val	Leu	Tyr	Glu	Glu	Ser	Met	Asn	Thr	Val	Leu	Val	Gln			
			340				345						350					
Glu	Val	Ile	Arg	Tyr	Asn	Arg	Leu	Leu	Gln	Val	Ile	Thr	Gln	Thr	Leu			
	355					360					365							
Gln	Asp	Leu	Leu	Lys	Ala	Leu	Lys	Gly	Leu	Val	Val	Met	Ser	Ser	Gln			
	370				375					380								
Leu	Glu	Leu	Met	Ala	Ala	Ser	Leu	Tyr	Asn	Asn	Thr	Val	Pro	Glu	Leu			
385				390					395						400			
Trp	Ser	Ala	Lys	Ala	Tyr	Pro	Ser	Leu	Lys	Pro	Leu	Ser	Ser	Trp	Val			
			405					410						415				
Met	Asp	Leu	Leu	Gln	Arg	Leu	Asp	Phe	Leu	Gln	Ala	Trp	Ile	Gln	Asp			
			420				425						430					
Gly	Ile	Pro	Ala	Val	Phe	Trp	Ile	Ser	Gly	Phe	Phe	Phe	Pro	Gln	Ala			
		435				440					445							
Phe	Leu	Thr	Gly	Thr	Leu	Gln	Asn	Phe	Ala	Arg	Lys	Phe	Val	Ile	Ser			
	450				455						460							
Ile	Asp	Thr	Ile	Ser	Phe	Asp	Phe	Lys	Val	Met	Phe	Glu	Ala	Pro	Ser			
465				470					475						480			
Glu	Leu	Thr	Gln	Arg	Pro	Gln	Val	Gly	Cys	Tyr	Ile	His	Gly	Leu	Phe			



Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys  
                     85                    90                    95  
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro  
                     100                    105                    110  
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly  
                     115                    120                    125  
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val  
                     130                    135                    140  
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp  
                     145                    150                    155                    160  
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro  
                     165                    170                    175  
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu  
                     180                    185                    190  
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala  
                     195                    200                    205  
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly  
                     210                    215                    220

&lt;210&gt; 5673

&lt;211&gt; 1279

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5673

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 120  
 ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag  
 180  
 tgagctgggc tctaacttca ctcaaaatt tatagtacag ctaagaaggc cagtctgtcc  
 240  
 atgaaaggga gccgagacaa gacgagggcg gcctcttcca ggctgtgcc aagtgtcctt  
 300  
 ggggtcccg ccatggtccac acttctgcag catccgcaga acatgtggcc gggctctgcc  
 360  
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 420  
 gcagaagcag cccacagta gcagcccat ccagaggaag accactccgg agggccacag  
 480  
 gcctctgcag ccttgccact gccgcccagc cctccatctc agcgggatgt gcagggtgag  
 540  
 acaggaatgc agggacgttc tgcccctagg tcagcctctt catccgcctg ttgtgcttcg  
 600  
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 660  
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 780  
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 840

gccagactga gcagctcttc tctgcggggg aagaggttct tgcgcttctg agcaccaatg  
 900  
 catcttctaa cagctccatc ttcttgctga actgcacttc taaaatgggg ataacctctg  
 960  
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 1080  
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 1140  
 ctggtttaac gtgagactct gttctgtggg aaataacagc aggaattttt atcagtatcc  
 1200  
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 1279

<210> 5674

<211> 81

<212> PRT

<213> Homo sapiens

<400> 5674

Leu	His	Ser	Gln	Ile	Tyr	Ser	Thr	Ala	Lys	Lys	Ala	Ser	Leu	Ser	Met
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Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
		20						25				30			
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
		35					40				45				
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55			60						
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
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Gln															

<210> 5675

<211> 1074

<212> DNA

<213> Homo sapiens

<400> 5675

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 120  
 gggctgggccc aggggctgag gctgaaagca gcagcctgcc tagtgggtga cgccaggggc  
 180  
 cgggtgtaaca tggcaccgag gttggggcca cagcaatgtg tgggacggtg ggggtgggctg  
 240  
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 300  
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 420  
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 720  
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 780  
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 840  
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 1074

&lt;210&gt; 5676

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5676

Glu	Val	Thr	Val	Leu	Cys	Thr	Gly	Leu	Ser	Leu	Ser	Ile	Gly	Met	Thr
1				5				10						15	
Ala	Thr	Ser	Gln	Gly	Cys	Arg	Ala	Gly	Gly	Arg	Cys	Gly	Trp	Ala	Cys
			20					25					30		
Ala	Cys	Phe	Arg	Arg	Gln	Gln	Asn	Arg	Thr	Gln	Pro	Ala	Val	Thr	Pro
			35				40						45		
His	Ser	Arg	Ser	Arg	Arg	Thr	Ala	Ser	Arg	Met	Ser	Leu	Gly	Glu	Gln
			50				55					60			
Gly	Ser	Thr	Thr	Gly	Leu	Thr	Leu	Gly	His	Arg	Ala	Pro	Ala	Pro	Trp
65					70				75					80	
Gly	Met	Ser	Trp	His	Asn	His	Arg	Arg	Gln	Val	Asn	Arg	Ile	Lys	Ser
				85					90					95	
Arg	Gln	Cys	Leu	Ser	Met	Ser	Glu	Thr	Ala	Val	Ala	Arg	Ala	Trp	Pro
			100					105					110		
Arg	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Ile	Ser	Pro	Gly	Leu	Ala	Arg	Gly
			115				120					125			
Gly	Leu	Gly	Leu	Thr	Pro	Arg	Thr	Arg	Cys	Pro	Gln	Arg	Val	Pro	His
			130				135					140			
Cys															
145															

&lt;210&gt; 5677

&lt;211&gt; 477



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5677

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 60  
 aaaaggacac tggatgaagta gcggtagcac tctccacgt tgcccaaggg ggttgctggt  
 120  
 agggaaagca agatgcagca gtgaggccct ctctggtatc cattcattca cttcactcaa  
 180  
 cagctgttta tgaccatgag caatacaagc cttgtgaaga tcttgagga gggcacaagc  
 240  
 cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattcgctt tctttccgca  
 300  
 gccgccgctg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca  
 360  
 ccagctggag aagaccacca atgctgagat gagggaggtg ctggctgagc tgctggagct  
 420  
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 477

&lt;210&gt; 5678

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5678

Met	Ala	Ser	Leu	Arg	Leu	Cys	Ser	Gly	His	Pro	Ser	Ser	Ser	Ser	Ser
1				5					10					15	
Ala	Ser	Thr	Ser	Leu	Ile	Ser	Ala	Leu	Val	Val	Phe	Ser	Ser	Trp	Cys
			20					25					30		
Met	Glu	Trp	Thr	Ser	Arg	Tyr	Phe	His	Met	Gln	Ile	Arg	Gly	Arg	Gly
		35				40					45				
Ser	Gly	Gly	Cys	Gly	Lys	Lys	Ala	Asn	Trp	Gly	Arg	Gln	Gln	Gly	Phe
	50				55					60					
Ser	Leu	Glu	Gln	Thr	Ser	Ala	Ala	Cys	Ala	Leu	Leu	Gln	Asp	Leu	His
65				70					75					80	
Lys	Ala	Cys	Ile	Ala	His	Gly	His	Lys	Gln	Leu	Leu	Ser	Glu	Val	Asn
			85					90					95		
Glu	Trp	Ile	Pro	Glu	Arg	Ala	Ser	Leu	Leu	His	Leu	Ala	Phe	Pro	Thr
		100					105					110			
Ser	Asn	Pro	Leu	Gly	Gln	Arg	Gly	Gly	Val	Leu	Pro	Leu	Leu	His	Gln
	115				120					125					
Cys	Pro	Phe	Leu	Pro	Trp	Ser	Gln	Ala	Ala	Ser	Phe	Gln	His	Arg	Pro
	130				135					140					
Leu	Gln	Arg	Gly	Thr	Ala	Ala									
145					150										

&lt;210&gt; 5679

&lt;211&gt; 665

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5679

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 120  
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca  
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 480  
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 540  
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 600  
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 660  
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 665

<210> 5680  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 5680  
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 20 25 30  
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 35 40 45  
 Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His Ser Ser  
 50 55 60  
 Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro Ala Pro  
 65 70 75 80  
 Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala Asn Val  
 85 90 95  
 Lys Ala Ala Pro Gln Ser Arg Lys Ala Glu Asn Leu Gln Glu Asn Pro  
 100 105 110  
 Pro Val Ile Val Thr Arg Val Leu Gln Ala Leu Gly Thr Val Ala Val  
 115 120 125  
 Ala Leu Gly Ala Leu Gly Ala Ala Tyr Tyr Ile Thr Glu Ser Leu  
 130 135 140

<210> 5681  
 <211> 1402  
 <212> DNA  
 <213> Homo sapiens

<400> 5681  
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120  
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180  
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240  
gaataccacc tctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc  
300  
ttccacaagt cagggtgcttt ggagggacag cctcgaggct actgttttgt taactttgaa  
360  
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420  
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720  
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900  
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960  
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1140  
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1200  
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1320  
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1380  
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1402

&lt;210&gt; 5682

&lt;211&gt; 190

&lt;212&gt; PRT

<213> Homo sapiens

<400> 5682

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 20           25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
 35           40           45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
 50           55           60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
 65           70           75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
 85           90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
 100          105          110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
 115          120          125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
 130          135          140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
 145          150          155          160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
 165          170          175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
 180          185          190

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<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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 120
atgctttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
 180
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 240
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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

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Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

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      1           5           10           15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20           25           30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35           40           45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50           55           60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65           70           75           80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85           90           95
Ser Leu Gly Gln Arg Met Asp
      100

```

&lt;210&gt; 5685

&lt;211&gt; 604

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5685

```

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120
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360
aatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatgggtc caggtggcct ctctacgaac
480
caacatggca tctctcgagc agaggccatg ggccagtggg tgcgggctgc catccccga
540
cgacttcagg gagggagttc ccctaaaggt gcccatgggc tgtggccctc tagaccgggg
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604

```

&lt;210&gt; 5686

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5686

```

Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1           5           10           15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20           25           30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

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35 40 45  
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val  
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 Pro Ser Gln Arg Pro  
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<210> 5687  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<400> 5687  
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 120  
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc  
 180  
 ctgcagccgg tgtgccccca ggggaccaca tgcataca cgggtggaag cttccagtgt  
 240  
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 328

<210> 5688  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 5688  
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 Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro  
 20 25 30  
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp  
 35 40 45  
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val  
 50 55 60  
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys  
 65 70 75 80  
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys  
 85 90 95  
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met  
 100 105

<210> 5689  
 <211> 1897  
 <212> DNA  
 <213> Homo sapiens

<400> 5689  
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120  
tgtgtgggtg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac  
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240  
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg  
300  
aacactgaga cccagggtc aaaggcagac tcctcagggt cccgggaagg gagcctttcc  
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ccagccagag gagacggctc tcctatcctc aatgggtggga gtttgtctcc aggaacggca  
420  
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct  
480  
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540  
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc  
600  
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660  
cctgaacaga caaatggtgt gcatacccca cctcacgtgg ccagtgcctc tgcagggggc  
720  
gtctccccag gtgccctgcg tcggagtctg gaagccatca aagcgatgtc ctccaaaggc  
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1320  
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1380  
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1440  
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1680

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 1800  
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 1897

<210> 5690

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

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Val	Gly	Gln	Cys	Val	Val	Val	Phe	Ser	Gln	Ala	Pro	Ser	Gly	Arg	Ala
		20						25				30			
Pro	Leu	Ser	Pro	Ser	Leu	Asn	Ser	Arg	Pro	Ser	Pro	Ile	Ser	Ala	Thr
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<210> 5691

<211> 1227

<212> DNA

<213> Homo sapiens

<400> 5691

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 120  
 catcaaaacg aggacgaacc cattcgtgtt agctaccatc ggaatatcca ctataattca  
 180  
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 1227

&lt;210&gt; 5692

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5692

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Ala	Glu	Met	Tyr	Asn	Arg	Pro	Val	Glu	Val	Tyr	Gln	Tyr	Ser	Thr	Glu
			20					25					30		
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
			35				40					45			
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
		50				55					60				
Asn	Lys	Ala	Thr	Ile	Gly	Val	Gly	Leu	Gly	Cys	His	His	Ser	Asn	Gln
65					70				75					80	
Gly	Leu	Gln	Ser	Ser	Leu										
					85										

&lt;210&gt; 5693

&lt;211&gt; 389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5693

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 gacactgggg cacctctgcg cctgtcccaa ggccacgctg gctctcttca ggcccatggc  
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 240  
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<210> 5694  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 5694  
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 Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu  
 35 40 45  
 Ile Val Ala Met Asp Met Lys Val Ser Gly His Val  
 50 55 60

<210> 5695  
 <211> 1417  
 <212> DNA  
 <213> Homo sapiens

<400> 5695  
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<210> 5696

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

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Glu	Glu	Ala	Gly	Ala	Leu	Arg	Gln	Ala	Leu	Thr	Phe	Ser	Leu	Leu	Glu
			20					25					30		
Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
		35					40					45			
Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu
	50					55					60				
Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu
65					70					75				80	
Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg
				85					90					95	
Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr
			100						105				110		
Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu
		115					120					125			
Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu
		130					135					140			
Ala	Ala	Ser	Gly	Pro	Thr	Leu	Ala	Gly	Gln	Thr	Leu	Lys	Gly	Pro	Trp
145					150					155				160	
Asn	Asn	Leu	Glu	Arg	Leu	Ala	Glu	Asn	Thr	Gly	Glu	Phe	Gln	Glu	Val
			165						170				175		
Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg
			180						185				190		
Val	Val	Arg	Val	Glu	Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Gln	Tyr
			195					200					205		
Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val

210	215	220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile		
225	230	235
Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val		240
	245	250
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		255
	260	265
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
	275	280
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		285
	290	295
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		300
305	310	315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
	325	330
Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		335
	340	345
Ala Ser Pro Asp Asp Pro Ser Gly Leu Pro Gly Arg Ser Pro Asp Thr		350
	355	360
		365

&lt;210&gt; 5697

&lt;211&gt; 3362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5697

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2100  
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&lt;210&gt; 5698

&lt;211&gt; 403

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5698

Met	Phe	Val	Ala	Ser	Glu	Arg	Lys	Met	Arg	Ala	His	Gln	Val	Leu	Thr
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Phe	Leu	Leu	Leu	Phe	Val	Ile	Thr	Ser	Val	Ala	Ser	Glu	Asn	Ala	Ser
			20					25					30		
Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
			35				40					45			
Cys	Asp	Leu	Asp	Ala	Ile	Trp	Gly	Ile	Val	Val	Glu	Ala	Val	Ala	Gly
	50					55				60					
Ala	Gly	Ala	Leu	Ile	Thr	Leu	Leu	Leu	Met	Leu	Ile	Leu	Leu	Val	Arg
65					70					75				80	
Leu	Pro	Phe	Ile	Lys	Glu	Lys	Glu	Lys	Lys	Ser	Pro	Val	Gly	Leu	His
				85				90						95	
Phe	Leu	Phe	Leu	Gly	Thr	Leu	Gly	Leu	Phe	Gly	Leu	Thr	Phe	Ala	
			100				105					110			
Phe	Ile	Ile	Gln	Glu	Asp	Glu	Thr	Ile	Cys	Ser	Val	Arg	Arg	Phe	Leu
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 180 185 190  
 Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met  
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 Gly Asn Val Lys Leu Gln Gln Gly Asp Ala Trp Asn Asp Pro Thr Leu  
 260 265 270  
 Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala  
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 Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe  
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 Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser  
 355 360 365  
 Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val  
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 Leu Asn Gly Gly Thr Ile Pro Thr Ala Pro Pro Ser His Thr Gly Arg  
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 His Leu Trp

&lt;210&gt; 5699

&lt;211&gt; 1565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5699

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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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Ser	Gln	Ala	Asp	Ser	Lys	Lys	Lys	Ser	Asn	Leu	Met	Met	Ser	Leu	Phe
			20					25				30			
Glu	Pro	Gly	Pro	Glu	Pro	Leu	Pro	Trp	Leu	Gly	Lys	Met	Ala	Gln	Leu



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Gly Pro Ile Ser Asp Ala Lys Glu Asn Pro Tyr Gly Glu Asp Asp Asn
      50              55              60
Lys Ser Pro Phe Pro Leu Gln Pro Lys Asn Lys Arg Ser Tyr Ala Gln
65      70      75      80
Asn Val Thr Val Trp Ile Lys Pro Ser Gly Leu Gln Thr Asp Val Gln
      85      90      95
Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe
      100      105      110
Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe
      115      120      125
Leu Asp Leu Leu Lys Gly Val Ala Asp Met Leu Glu Arg Glu Cys Thr
      130      135      140
Leu Leu Pro Glu Thr Ala His Pro Asp Ala Ala Phe Gln Leu Thr His
145      150      155      160
Ala Ala Gln Gln Leu Lys Leu Ala Ser Thr Gly Thr Ser Glu Tyr Ala
      165      170      175
Ala Tyr Asp Gln Asn Ile Thr Pro Leu His Thr Asp Phe Ser Gly Ser
      180      185      190
Ser Thr Glu Arg Ile
      195

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&lt;210&gt; 5701

&lt;211&gt; 1885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5701

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780

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 1860  
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 1885

&lt;210&gt; 5702

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5702

Met Asp Thr Leu Glu Val Thr Trp Ala Asn Gly Ser Thr Ala Leu  
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 Pro Pro Pro Leu Ala Pro Asn Ile Ser Val Pro His Arg Cys Leu Leu  
 20 25 30  
 Leu Leu Tyr Glu Asp Ile Gly Thr Ser Arg Val Arg Tyr Trp Asp Leu  
 35 40 45  
 Leu Leu Leu Ile Pro Asn Val Leu Phe Leu Ile Phe Leu Leu Trp Lys  
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<210> 5703
<211> 1496
<212> DNA
<213> Homo sapiens
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4865

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 600  
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 1496

&lt;210&gt; 5704

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5704

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Tyr	Leu	Arg	Trp	Glu	Ser	Phe	Leu	Gln	Gln	Gln	Leu	Gln	Ala	Leu	Pro
		20						25					30		
Glu	Gly	Ser	Val	Leu	Arg	Arg	Gly	Phe	Gln	Thr	Cys	Glu	His	Trp	Lys
		35					40					45			
Gln	Ile	Phe	Met	Glu	Ile	Val	Gly	Val	Gln	Ser	Ala	Leu	Cys	Gly	Leu
	50					55					60				
Val	Leu	Ser	Leu	Leu	Ile	Cys	Val	Ala	Ala	Val	Ala	Val	Phe	Thr	Thr

65	70										75					80				
His	Ile	Leu	Leu	Leu	Leu	Pro	Val	Leu	Leu	Ser	Ile	Leu	Gly	Ile	Val					
				85					90					95						
Cys	Leu	Val	Val	Thr	Ile	Met	Tyr	Trp	Ser	Gly	Trp	Glu	Met	Gly	Ala					
				100					105					110						
Val	Glu	Ala	Ile	Ser	Leu	Ser	Ile	Leu	Val	Gly	Ser	Ser	Val	Asp	Tyr					
				115					120					125						
Cys	Val	His	Leu	Val	Glu	Gly	Tyr	Leu	Leu	Ala	Gly	Glu	Asn	Leu	Pro					
				130					135					140						
Pro	His	Gln	Ala	Glu	Asp	Ala	Arg	Thr	Gln	Arg	Gln	Trp	Arg	Thr	Leu					
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Glu	Ala	Val	Arg	His	Val	Gly	Val	Ala	Ile	Val	Ser	Ser	Ala	Leu	Thr					
				165					170					175						
Thr	Val	Ile	Ala	Thr	Val	Pro	Leu	Phe	Phe	Cys	Ile	Ile	Ala	Pro	Phe					
				180					185					190						
Ala	Lys	Phe	Gly	Lys	Ile	Val	Ala	Leu	Asn	Thr	Gly	Val	Ser	Ile	Leu					
				195					200					205						
Tyr	Thr	Leu	Thr	Val	Ser	Thr	Ala	Leu	Leu	Gly	Ile	Met	Ala	Pro	Ser					
				210					215					220						
Ser	Phe	Thr	Arg	Thr	Arg	Thr	Ser	Phe	Leu	Lys	Ala	Leu	Gly	Ala	Val					
				225					230					235						
Leu	Leu	Ala	Gly	Ala	Leu	Gly	Leu	Gly	Ala	Cys	Leu	Val	Leu	Leu	Gln					
				245					250					255						
Ser	Gly	Tyr	Lys	Ile	Pro	Leu	Pro	Ala	Gly	Ala	Ser	Leu								
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<210> 5705
<211> 768
<212> DNA
<213> Homo sapiens
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600
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660

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 768

<210> 5706  
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 <213> Homo sapiens

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 35 40 45  
 His Thr Asn Arg Thr Thr Ser Trp Ile Asp Pro Arg Asp Arg Tyr Thr  
 50 55 60  
 Lys Pro Leu Thr Phe Ala Asp Cys Ile Ser Asp Glu Leu Pro Leu Gly  
 65 70 75 80  
 Trp Glu Glu Ala Tyr Asp Pro Gln Val Gly Asp Tyr Phe Ile Asp His  
 85 90 95  
 Asn Thr Lys Thr Thr Gln Ile Glu Asp Pro Arg Val Gln Trp Arg Arg  
 100 105 110  
 Glu Gln Glu His Met Leu Lys Asp Tyr Leu Val Val Ala Gln Glu Ala  
 115 120 125  
 Leu Ser Ala Gln Lys Glu Ile Tyr Gln Val Lys Gln Gln Arg Leu Glu  
 130 135 140  
 Leu Ala Gln Gln Glu Tyr Gln Gln Leu His Ala Val Trp Glu His Lys  
 145 150 155 160  
 Leu Gly Ser Gln Val Ser Leu Val Ser Gly Ser Ser Ser Ser Lys  
 165 170 175  
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 Ala Trp Leu Ser Asp Pro Glu Glu Asn Arg  
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<210> 5707  
 <211> 6988  
 <212> DNA  
 <213> Homo sapiens

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<211> 506

<212> PRT

<213> Homo sapiens

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&lt;210&gt; 5710

&lt;211&gt; 441

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5710

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&lt;213&gt; Homo sapiens

&lt;400&gt; 5713

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 1996

&lt;210&gt; 5714

&lt;211&gt; 408

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5714

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			20					25					30		
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
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		50				55					60				
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
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&lt;210&gt; 5716

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5716

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[illegible]

<210> 5717

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 5717

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180					
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240					
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300					
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360					
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420					
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480					
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540					
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&lt;210&gt; 5718

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5718

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			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35				40						45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
	50					55					60				
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70						75				80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
			85					90					95		
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105					110		
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
		115					120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
	130					135					140				
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150						155				160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
			165					170					175		
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180					185					190		
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
		195					200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
	210					215					220				
Asn	Ala	Tyr	Val												

225

&lt;210&gt; 5719

&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5719

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<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

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His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35					40					45			
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65				70					75					80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90						95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
		100					105					110			
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
		115					120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

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His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys		160
	165	170
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg		175
	180	185
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr		190
	195	200
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe		205
	210	215
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu		220
225	230	235
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys		240
	245	250
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln		255
	260	265
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly		270
	275	280
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile		285
	290	295
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys		300
305	310	315
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg		320
	325	330
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro		335
	340	345
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg		350
	355	360
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly		365
	370	375
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly		380
385	390	395
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys		400
	405	410
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg		415
	420	425
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly		430
	435	440
Pro Gly Leu Ser Pro Leu Leu		445
450	455	

&lt;210&gt; 5721

&lt;211&gt; 400

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5721

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<210> 5722  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens

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 Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu Pro Cys Leu Leu  
 35 40 45  
 Asp Ala Asp Lys Tyr Phe Trp Trp Ala Leu Leu Tyr Leu Val Asn Thr  
 50 55 60  
 Ser Phe Lys Glu Asp Gly Pro Asp Tyr Thr Glu His Leu Pro Cys Pro  
 65 70 75 80

<210> 5723  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

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 376

<210> 5724  
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 <212> PRT  
 <213> Homo sapiens

<400> 5724  
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      20             25             30
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His
      35             40             45
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys
      50             55             60
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro
65             70             75             80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val
      85             90             95
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro
      100            105            110
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala
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&lt;210&gt; 5725

&lt;211&gt; 1160

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5725

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<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

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Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Arg	Ser	Gly	Gly	Gly	
			20					25					30		
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
			35				40					45			
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val
			50			55					60				
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe
65					70					75				80	
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser
				85					90					95	
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly
			100					105					110		
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
		115					120					125			
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala
	130					135					140				
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly
145					150					155					160
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
			165						170					175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
			180					185					190		
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
		195						200					205		
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
		210				215					220				
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly
225					230					235					240
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
			245						250					255	
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Asp

<210> 5727

<211> 1237

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5727

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120  
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1237

&lt;210&gt; 5728

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5728

Xaa Arg Arg Glu Val Thr Thr Arg Thr Gly Ser Val Ser Thr Thr Gln



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<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

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Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20				25					30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
		35				40					45				
Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
		20					25					30			
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
	35					40					45				
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50					55					60				
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65					70					75					80
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
			85					90					95		
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
		100						105					110		
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
	115						120					125			
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
	130					135					140				
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145					150					155					160
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165					170						175	
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
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Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 720  
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 900  
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 950

&lt;210&gt; 5734

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5734

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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20					25					30		
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
			35				40					45			
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
			50			55				60					
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
65					70				75					80	
Ser	Lys														

&lt;210&gt; 5735

&lt;211&gt; 4241

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5735



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 4080  
 tcttattcag atgtatcaca ttcattttac attaccacc tattgtcgca tggtagaata  
 4140  
 gttttttgtc tctgaatatg tgaataactt gacttgcatt gatcttttta catatttaat  
 4200  
 aaaaaaaaaa gtatatgtta aaaaaaaaaa aaaaaaaaaa a  
 4241

&lt;210&gt; 5736

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5736

Met Pro Gly Pro Thr Gln Thr Leu Ser Pro Asn Gly Glu Asn Asn Asn  
 1 5 10 15  
 Asp Ile Ile Gln Asp Asn Asn Gly Thr Ile Ile Pro Phe Arg Lys His  
 20 25 30  
 Thr Val Arg Gly Glu Arg Ser Tyr Ser Trp Gly Met Ala Val Asn Val  
 35 40 45  
 Tyr Ser Thr Ser Ile Thr Gln Glu Thr Met Ser Arg His Asp Ile Ile  
 50 55 60  
 Ala Trp Val Asn Asp Ile Val Ser Leu Asn Tyr Thr Lys Val Glu Gln  
 65 70 75 80  
 Leu Cys Ser Gly Ala Ala Tyr Cys Gln Phe Met Asp Met Leu Phe Pro  
 85 90 95  
 Gly Cys Ile Ser Leu Lys Lys Val Lys Phe Gln Ala Lys Leu Glu His

[illegible]

<210> 5737

<211> 340

<212> DNA

<213> Homo sapiens

<400> 5737

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60      ncaaccccccc tggatgtggc tcttcggata tgcctttccc acggagccca gagacaaatg
120     tgcgtggccc tgggacagct ggaccggcct ccagacctcg cccatgacgg gaggagtctg
180     tggctgaaca tcaggggcaa ggaggcggct gccaatcca tgttccatgt ctccacgcca
240     ctgccagtga tgaccggtgg tttcctgatg tacctgagag ggagctgga gcctcagtgg
300     aagatgttgc agtgccatcc tcacctggtg gcttgaaatc ggccaagggtg ggagcattta
340     caccgcagaa atgacaccgc acgccagcgc cccgcggccg

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<210> 5738

<211> 99

<212> PRT

<213> Homo sapiens

&lt;400&gt; 5738

```

Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
 1           5           10           15
Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
      20           25           30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
      35           40           45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
      50           55           60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65           70           75           80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
      85           90           95
Gly Gly Xaa

```

&lt;210&gt; 5739

&lt;211&gt; 780

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5739

```

actttcataa ttgtaacatt gaaatcttta atctggaata tgtactggca taaagagtga
60
ggcacatata tggctttact attttccaga gggccaactg cttttactga ataatccatt
120
ttactcggtta attggaaaca cctctagcct gtactaaatt tccatattta tttggcccgt
180
ttcaaagtcc tctattctct gctcatctgt ccacatctaa gtgctttaac tattgtggct
240
ttataaaata ttccaatata ccataggacc ttatccttag tacttcctat tttaaagttt
300
tccttgacaga caggactttt aaataccatc tcacagcacc catcatgtcc tatcttcagg
360
aaataaaatc tctgggtatt tccaagggaa gtgaaggact gacaccatga ttagaaagca
420
gagccagcac catggcccgt ccctgagcat gtccagcaaa ccctgccagg ctctgcagct
480
cctgagcacc ctgccttcgg gtctgccagt gtgtgggggc cagaagagaa aaacaacca
540
gggggaatgc ctcttcccc cagcaggaaa gcagcttggt catcatctgt ctgaaagcag
600
gtgctgcagc agctggcaac aaagccactc tgaaaggagc tgtgtgcact gcctgtctgg
660
aaggccatgc cagagtccat cgttgcctcc accctacctg tgcaggaaac ctggacatca
720
ccacttcaag gccctacctt cctttctggg cagagcccaa ccacaataaa caggacgcgt
780

```

&lt;210&gt; 5740

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5740

```

Met Ile Arg Lys Gln Ser Gln His His Gly Pro Ser Leu Ser Met Ser
 1           5           10           15
Ser Lys Pro Cys Gln Ala Leu Gln Leu Leu Ser Thr Leu Pro Ser Gly
      20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
      35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
      50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
      85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
      100          105          110
Phe Leu Gly Arg Ala Gln Pro Gln
      115          120

```

&lt;210&gt; 5741

&lt;211&gt; 2444

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5741

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ggcggctgct gctccggggcc tgggcacagc aagcggcgac gtcaagctcc cgggggttggc
60
gcgggttggcg ggggcagctcc cgagcgtgag gaggtcggcg caggctacaa cagtgaggac
120
gagtatgagg cggctgcagc acgcatcgag gctatggacc ctgccactgt cgagcagcag
180
gagcattggt ttgaaaaggc cctacgagac aagaagggt tcatcatcaa gcagatgaag
240
gaggatggcg cctgtctctt ccgggctgta gctgaccagg tgtatggaga ccaggacatg
300
catgaggttg tgcgaaagca ttgcatggac tatctgatga agaatgccga ctacttctcc
360
aactatgtca cagaggactt taccacctac attaacagga agcggaaaaa caattgccat
420
ggcaaccaca ttgagatgca ggccatggca gagatgtaca accgtcctgt ggaggtgtac
480
cagtacagca cagaacccat caacacattc catgggatac atcaaaacga ggacgaaccc
540
attcgtgtta gctaccatcg gaatatccac tataattcag tggatgaatcc taacaaggcc
600
accattggtg tggggctggg cctgccatca ttcaaaccag ggtttgcaga gcagtctctg
660
atgaagaatg ccataaaaaac atcggaggag tcatggattg aacagcagat gctagaagac
720
aagaaacggg ccacagactg ggaggccaca aatgaagcca tcgaggagca ggtggctcgg
780
gaatcctacc tgcagtgggt gcgggatcag gagaaacagg ctccgccagg cggaggcccc
840
agccagcccc ggaaagccag cgccacatgc agttcggcca cagcagcagc ctccagtggc
900

```

ctggaggagt ggactagccg gtccccgcgg cagcggagtt cagcctcgtc acctgagcac  
960  
cctgagctgc atgctgaatt gggcatgaag cccccctccc caggcactgt tttagctctt  
1020  
gccaaacctc cttegccctg tgcgccaggt acaagcagtc agttctcggc agggggccgac  
1080  
cgggcaactt ccccccttgt gtccctctac cctgcttttg agtgccgggc cctcattcag  
1140  
cagatgtccc cctctgcctt tggctctgaat gactgggatg atgatgagat cctagcttcg  
1200  
gtgctggcag tgtcccaaca ggaataccta gacagtatga agaaaaacaa agtgcacaga  
1260  
gaccgcctcc cagacaagag ttgatggaga cccagggatt ggacaccatc tcccaacccc  
1320  
agtactcctg ctctccggtg ccacctcacc ttctttgget tcttccctct tgcctccttc  
1380  
tgttctttct gctctccctt cttttccctc ctctcactt ccctctggct agcccccccc  
1440  
tgcactctct ctcatgccc ctgccactat cacctgtctc tctgccagct gatgtgcct  
1500  
gttgcccccc accccatccc gcacagaacc atccctgcat tccacagggg actcgggcaa  
1560  
gggtgccgaa gatagacaag aggcacacag agacagacca actggcagcc aggcagcccc  
1620  
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1680  
gaaaaacttg ccgccacccc ccgacactga tgccagggag gtgggaggaa gaagtgggaa  
1740  
atttcccttc ccagtacccc caagaacgtc tgagccttca atgttgaatt ttttctttat  
1800  
taaaattact tttatcttat aaaatcaact aatcaaaaat gatatagacg acagcactgg  
1860  
ctctgtgaag gtggcatctt tctgggcagg caggccatgg ggcatggagg agggtgcaaa  
1920  
gatatgggtt gctgtcttct ggcctccagc tgcattggagg ccggcccagg gtctaggggtg  
1980  
tgactgggc aagggcaggg cggcaggtgt caggccggct tggacaatga aaccctgacc  
2040  
ttgctgcatt ccttttgctt ccaccaccac tagcttcttt ggaatcttgg ggtgggggtc  
2100  
atctttgggg attatggctg ccaccggga tttgagtgtg gggagtgtgg gagcagcctt  
2160  
ggcagatggg gacccgtgc cctgcaggtg ttgacaagat ccgccatctg taatgtcctt  
2220  
ggcacaataa aaccaaagt cagtttcctt gagcgactct gtctgtgtg gggcaggggt  
2280  
tgggcgggccc tctgggcaga ggatgcaatg gcacggacct tggcttgacc tcagaggtgt  
2340  
gaatgtctc cagcagggtc tgtctggggg cctggagttt gtatttgatt tgctgcttat  
2400  
taaacctcct tctggacctt ttgccactgg aaaaaaaaaa aaaa  
2444

&lt;210&gt; 5742

&lt;211&gt; 427

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5742

Gly Gly Cys Cys Ser Gly Pro Gly His Ser Lys Arg Arg Arg Gln Ala  
 1 5 10 15  
 Pro Gly Val Gly Ala Val Gly Gly Gly Ser Pro Glu Arg Glu Glu Val  
 20 25 30  
 Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Arg  
 35 40 45  
 Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe  
 50 55 60  
 Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys  
 65 70 75 80  
 Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly  
 85 90 95  
 Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu  
 100 105 110  
 Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr  
 115 120 125  
 Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile  
 130 135 140  
 Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr  
 145 150 155 160  
 Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn  
 165 170 175  
 Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn  
 180 185 190  
 Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu  
 195 200 205  
 Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala  
 210 215 220  
 Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp  
 225 230 235 240  
 Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu  
 245 250 255  
 Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys  
 260 265 270  
 Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala  
 275 280 285  
 Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp  
 290 295 300  
 Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His  
 305 310 315 320  
 Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr  
 325 330 335  
 Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser  
 340 345 350  
 Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser  
 355 360 365  
 Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro  
 370 375 380  
 Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser





&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5745

```

aaagtttttt tttttttctg cttcaggcac acggggaacc acgcgtttta atcaacgtat
60
cgataaaaaa caccagggca cggacactcc aggggaaatg cttattgagt aaagtatccg
120
aggaagtgat gcagggcagg taaacagctg gtgctcagca gcgagaggac gcgtcactct
180
gccgttctgc agggtgacgc cctccccgta cctcgctgag agccacctgc agacacagca
240
ggccacagca gaatgcacag gtcactgttg taggggaaca aatcgtaatg cccagagaaa
300
acctgatagt gaaatgtaaa cagacaggac agggtggttc caggtggcca ccaccgccag
360
gcccttcccc tgattgatct gagagcttca cagccggcgg cactgggacc catttccaga
420
aacactggaa caccaggtct ctcagatgcc cgcgggaggg gccccaggga ggccctttctc
480
agcatcagct tttgggtgac aaaccccata cagcaaaact gtacaaatac acacaacgga
540
ccccagctg acagtgagac caggacccta ggaaggtcag gtggtggtga agtcatcccc
600
tctccaaccg agcagagcct ggggttgggc tctgatgacc tcccgggcaa agtgtccagg
660
tggaggaagc aaactcccaa atggggcaca aaggtaataa aaagcagctg agagattgcg
720
ggatggggtc gggggccactt ggccgacacc ttctgcctcg cctggccggg cggggccagc
780
ctctgccac aggatggagg gtgactgtgc accctgctcc atgtacagga cggggtgagg
840
gtcccatgg
849

```

&lt;210&gt; 5746

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5746

```

Met Thr Ser Pro Pro Pro Asp Leu Pro Arg Val Leu Val Ser Leu Ser
1          5          10          15
Ala Gly Gly Pro Leu Cys Val Phe Val Gln Phe Cys Cys Met Gly Phe
20          25          30
Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
35          40          45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
50          55          60
Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp
65          70          75          80
Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His
85          90          95
Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

```

	100		105		110	
Leu Cys Ile	Leu Leu Trp	Pro Ala Val	Ser Ala Gly	Gly Ser Gln	Arg	
115		120		125		
Gly Thr Gly	Arg Ala Ser	Pro Cys Arg	Thr Ala Glu			
130		135		140		

&lt;210&gt; 5747

&lt;211&gt; 1999

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5747

```

nccatggccc agtccggcgg ggaggctcgg cccggggccca agacggcggt gcagatccgc
60
gtcgccatcc aggaggccga ggacgtggac gagttggagg acgaggagga gggggcggag
120
actcggggcg ccggggaccc ggcccgttac ctacgccccg gctggggcag cgcgagcgag
180
gaggagccga gccgcgggca cagtggcacc actgcaagtg gaggtgagaa cgagcgtgag
240
gacctggagc aggagtggaa gcccccgat gaggagtga tcaagaaact ggtggatcag
300
atcgaattct acttttctga tgaaaacctg gagaaggacg cttttttgct aaaacacgtg
360
aggaggaaca agctgggata tgtgagcggt aagctactca catccttcaa aaaggtgaaa
420
catcttacac gggactggag aaccacagca catgctttga agtattcagt ggtccttgag
480
ttgaatgagg accaccggaa ggtgaggagg accacccccg tccactgtt cccaacgag
540
aacctcccca gcaagatgct cctggtctat gatctctact tgtctcctaa gctgtgggct
600
ctggccaccc cccagaagaa tggaagggtg caagagaagg tgatggaaca cctgctcaag
660
cttttcggga cttttggagt catctcatca gtgcggatcc tcaaacctgg gagagagctg
720
ccccctgaca tccggaggat cagcagccgc tacagccaag tggggaccca ggagtgtgcc
780
atcgtggagt tcgaggaggt ggaagcagcc atcaaagccc atgagttcat gatcacagaa
840
tctcagggca aagagaacat gaaagctgtc ctgattggta tgaagccacc caaaaagaaa
900
cctgccaaag acaaaaatca tgacgaggag cccactgcga gcatccacct gaacaagtc
960
ctgaacaaga gactcgagga gcttcagtac atgggtgatg agtcttctgc caacagctcc
1020
tctgaccccc agagcaaccc cacatccctt atggcgggccc gacggcacgc ggccaccaac
1080
aagctcagcc cgtctggcca ccagaatctc tttctgagtc caaatgcctc cccgtgcaca
1140
agtccttggg gcagcccctt ggcccaacgc aaaggcggtt ccagaaagtc cccactggcg
1200
gaggaaggta gactgaactg cagcaccagc cctgagatct tccgcaagtg tatggattat
1260

```

tcctctgaca gcagcgtcac tccctctggc agcccctggg tccggaggcg tgcceaagcc  
 1320  
 gagatgggga cccaggagaa aagccccggt acgagtcctcc tgctctcccg gaagatgcag  
 1380  
 actgcagatg ggctacccgt aggggtgctg aggttgccca ggggtcctga caacaccaga  
 1440  
 ggatttcatt gccatgagag gaggcaggcc tgtgtataaa taccttctat ttttaataca  
 1500  
 agctccactg aaaaccacct tcgttttcaa ggttctgaca aacacctggc atgacagaat  
 1560  
 ggaattcggt cccctttgag agatttttta ttcattgtaga cctcttaatt tatctatctg  
 1620  
 taatatacat aaatcggtac gccatgggtt gaagaccacc ttctagttca ggactcctgt  
 1680  
 tcttcccagc atggccacta ttttgatgat ggctgatgtg tgtgagtgtg atggccctga  
 1740  
 agggctgtag gacggagggt cccctggggga agtctgttct ttggtagtga atttttctct  
 1800  
 cttcttttgt atggaatttt tcccttcagt gactgagctg tcctcgatag gccatgcaag  
 1860  
 ggcttctga gagttcagga aagttctctt gtgcaacagc aagtagctaa gcctatagca  
 1920  
 tgggtgtctt taggaccaa tcatgttac ctgtcaagta aataaataat aaaacaccca  
 1980  
 aaaaaaaaaa aaaaaaaaaa  
 1999

&lt;210&gt; 5748

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5748

Xaa	Met	Ala	Gln	Ser	Gly	Gly	Glu	Ala	Arg	Pro	Gly	Pro	Lys	Thr	Ala
1			5					10					15		
Val	Gln	Ile	Arg	Val	Ala	Ile	Gln	Glu	Ala	Glu	Asp	Val	Asp	Glu	Leu
		20					25					30			
Glu	Asp	Glu	Glu	Glu	Gly	Ala	Glu	Thr	Arg	Gly	Ala	Gly	Asp	Pro	Ala
	35					40					45				
Arg	Tyr	Leu	Ser	Pro	Gly	Trp	Gly	Ser	Ala	Ser	Glu	Glu	Glu	Pro	Ser
	50				55					60					
Arg	Gly	His	Ser	Gly	Thr	Thr	Ala	Ser	Gly	Gly	Glu	Asn	Glu	Arg	Glu
65				70					75				80		
Asp	Leu	Glu	Gln	Glu	Trp	Lys	Pro	Pro	Asp	Glu	Glu	Leu	Ile	Lys	Lys
			85				90					95			
Leu	Val	Asp	Gln	Ile	Glu	Phe	Tyr	Phe	Ser	Asp	Glu	Asn	Leu	Glu	Lys
	100					105						110			
Asp	Ala	Phe	Leu	Leu	Lys	His	Val	Arg	Arg	Asn	Lys	Leu	Gly	Tyr	Val
	115					120					125				
Ser	Val	Lys	Leu	Leu	Thr	Ser	Phe	Lys	Lys	Val	Lys	His	Leu	Thr	Arg
	130				135					140					
Asp	Trp	Arg	Thr	Thr	Ala	His	Ala	Leu	Lys	Tyr	Ser	Val	Val	Leu	Glu
145				150					155					160	
Leu	Asn	Glu	Asp	His	Arg	Lys	Val	Arg	Arg	Thr	Thr	Pro	Val	Pro	Leu

Phe	Pro	Asn	Glu	Asn	Leu	Pro	Ser	Lys	Met	Leu	Leu	Val	Tyr	Asp	Leu
			180					185					190		
Tyr	Leu	Ser	Pro	Lys	Leu	Trp	Ala	Leu	Ala	Thr	Pro	Gln	Lys	Asn	Gly
		195					200					205			
Arg	Val	Gln	Glu	Lys	Val	Met	Glu	His	Leu	Leu	Lys	Leu	Phe	Gly	Thr
		210				215					220				
Phe	Gly	Val	Ile	Ser	Ser	Val	Arg	Ile	Leu	Lys	Pro	Gly	Arg	Glu	Leu
225					230					235					240
Pro	Pro	Asp	Ile	Arg	Arg	Ile	Ser	Ser	Arg	Tyr	Ser	Gln	Val	Gly	Thr
				245					250						255
Gln	Glu	Cys	Ala	Ile	Val	Glu	Phe	Glu	Glu	Val	Glu	Ala	Ala	Ile	Lys
			260					265					270		
Ala	His	Glu	Phe	Met	Ile	Thr	Glu	Ser	Gln	Gly	Lys	Glu	Asn	Met	Lys
		275					280					285			
Ala	Val	Leu	Ile	Gly	Met	Lys	Pro	Pro	Lys	Lys	Lys	Pro	Ala	Lys	Asp
		290				295					300				
Lys	Asn	His	Asp	Glu	Glu	Pro	Thr	Ala	Ser	Ile	His	Leu	Asn	Lys	Ser
305					310					315					320
Leu	Asn	Lys	Arg	Val	Glu	Glu	Leu	Gln	Tyr	Met	Gly	Asp	Glu	Ser	Ser
				325					330					335	
Ala	Asn	Ser	Ser	Ser	Asp	Pro	Glu	Ser	Asn	Pro	Thr	Ser	Pro	Met	Ala
			340					345					350		
Gly	Arg	Arg	His	Ala	Ala	Thr	Asn	Lys	Leu	Ser	Pro	Ser	Gly	His	Gln
		355					360					365			
Asn	Leu	Phe	Leu	Ser	Pro	Asn	Ala	Ser	Pro	Cys	Thr	Ser	Pro	Trp	Ser
	370					375					380				
Ser	Pro	Leu	Ala	Gln	Arg	Lys	Gly	Val	Ser	Arg	Lys	Ser	Pro	Leu	Ala
385					390					395					400
Glu	Glu	Gly	Arg	Leu	Asn	Cys	Ser	Thr	Ser	Pro	Glu	Ile	Phe	Arg	Lys
				405					410					415	
Cys	Met	Asp	Tyr	Ser	Ser	Asp	Ser	Ser	Val	Thr	Pro	Ser	Gly	Ser	Pro
			420					425					430		
Trp	Val	Arg	Arg	Arg	Arg	Gln	Ala	Glu	Met	Gly	Thr	Gln	Glu	Lys	Ser
		435					440					445			
Pro	Gly	Thr	Ser	Pro	Leu	Leu	Ser	Arg	Lys	Met	Gln	Thr	Ala	Asp	Gly
		450				455					460				
Leu	Pro	Val	Gly	Val	Leu	Arg	Leu	Pro	Arg	Gly	Pro	Asp	Asn	Thr	Arg
465					470					475					480
Gly	Phe	His	Gly	His	Glu	Arg	Ser	Arg	Ala	Cys	Val				
				485					490						

<210> 5749

<211> 2849

**<212> DNA**

<213> Homo sapiens

**<400> 5749**

gggtgagacg gtgggttgta tggagagaat gtgactgtac atttttataa gcaggactaa  
60

cccaggaag aggaaaaaat acatttaaca gtgaagaggc aacacagagc tccctattgt  
120

gaaataaaac ccatttcaaa agttattgga aagaaagtaa ggtatggctc ttatggggtta  
180

actagtggta gtcagtttct gctttttact ccctctgaat tattaattgt ttgccaggtt  
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&lt;211&gt; 522

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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Ser Leu Phe Gln Glu Val Gly Leu Lys Asn Cys Ser Ser			
210	215	220	

&lt;210&gt; 5755

&lt;211&gt; 1513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5755

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&lt;210&gt; 5756

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5756

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			20				25						30		
Ala	Ala	Leu	Leu	Ala	Gln	Asp	Tyr	Cys	Asp	Ala	Ile	Asp	Leu	Asn	Leu
			35				40						45		
Gly	Cys	Pro	Gln	Met	Ile	Ala	Lys	Arg	Gly	His	Tyr	Gly	Ala	Phe	Leu
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Gln	Asp	Glu	Trp	Asp	Leu	Leu	Gln	Arg	Met	Ile	Leu	Leu	Ala	His	Glu
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Lys	Leu	Ser	Val	Pro	Val	Thr	Cys	Lys	Ile	Arg	Val	Phe	Pro	Glu	Ile
			85						90					95	
Asp	Lys	Thr	Val	Arg	Tyr	Ala	Gln	Met	Leu	Glu	Lys	Ala	Gly	Cys	Gln
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Leu	Leu	Thr	Val	His	Gly	Arg	Thr	Lys	Glu	Gln	Lys	Gly	Pro	Leu	Ser

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Arg Cys Leu Arg Asp Thr Gly Val Gln Gly Val Met Ser Ala Glu Gly		160
165	170	175
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180	185	190
Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro		
195	200	205
Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu		
210	215	220
Gln Val His Gln Glu Leu Arg Glu Glu Leu Ala Lys Val Lys Thr Leu		
225	230	235
Glu Gly Ile Ala Ala Val Ser Gln Glu Leu Lys Leu Arg Cys Gln Glu		240
245	250	255
Glu Ile Ser Arg Gln Glu Gly Ala Lys Pro Thr Gly Asp Leu Pro Phe		
260	265	270
His Trp Ile Cys Gln Pro Tyr Ile Arg Pro Gly Pro Arg Glu Gly Ser		
275	280	285
Lys Glu Lys Ala Gly Ala Arg Ser Lys Arg Ala Leu Glu Glu Glu Glu		
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Gly Gly Thr Glu Val Leu Ser Lys Asn Lys Gln Lys Lys Gln Leu Arg		
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Asn Pro His Lys Thr Phe Asp Pro Ser Leu Lys Pro Lys Tyr Ala Lys		320
325	330	335
Cys Asp Gln Cys Gly Asn Pro Lys Gly Asn Arg Cys Val Phe Ser Leu		
340	345	350
Cys Arg Gly Cys Cys Lys Lys Arg Ala Ser Lys Glu Thr Ala Asp Cys		
355	360	365
Pro Gly His Gly Leu Leu Phe Lys Thr Lys Leu Glu Lys Ser Leu Ala		
370	375	380
Trp Lys Glu Ala Gln Pro Glu Leu Gln Glu Pro Gln Pro Ala Ala Pro		
385	390	395
Gly Thr Pro Gly Gly Phe Ser Glu Val Met Gly Ser Ala Leu Ala		400
405	410	415

&lt;210&gt; 5757

&lt;211&gt; 2362

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5757

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300



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1920

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<210> 5758

<211> 440

<212> PRT

<213> Homo sapiens

<400> 5758

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			20					25					30		
Asp	Gly	Ala	Leu	Glu	Asn	Ala	Gln	Asn	Leu	Gly	Tyr	Gln	Gly	Ala	Lys
		35					40					45			
Phe	Ala	Trp	Glu	Ser	Ala	Asp	Ser	Gly	Leu	Glu	Val	Cys	Pro	Glu	Asp
	50					55					60				
Ile	Tyr	Gly	Val	Gln	Glu	Val	His	Val	Asn	Gly	Ala	Val	Val	Leu	Ala
65					70					75					80
Phe	Glu	Leu	Tyr	Tyr	His	Thr	Thr	Gln	Asp	Leu	Gln	Leu	Phe	Arg	Glu
				85					90					95	
Gly	Gly	Gly	Trp	Glu	Val	Val	Arg	Ala	Val	Ala	Lys	Phe	Trp	Cys	Ser
			100					105					110		
Arg	Val	Glu	Trp	Ser	Pro	Arg	Glu	Glu	Lys	Tyr	His	Leu	Arg	Gly	Val
		115					120					125			
Met	Ser	Pro	Asp	Glu	Tyr	His	Ser	Gly	Val	Asn	Asn	Ser	Val	Tyr	Thr
	130					135					140				
Asn	Val	Leu	Val	Gln	Asn	Ser	Leu	Arg	Phe	Ala	Ala	Ala	Leu	Ala	Gln
145					150					155					160
Asp	Leu	Gly	Leu	Pro	Ile	Pro	Ser	Gln	Trp	Leu	Ala	Val	Ala	Asp	Lys
			165						170					175	
Ile	Lys	Val	Pro	Phe	Asp	Val	Glu	Gln	Asn	Phe	His	Pro	Glu	Phe	Asp
		180						185					190		
Gly	Tyr	Glu	Pro	Gly	Glu	Val	Val	Lys	Gln	Ala	Asp	Val	Val	Leu	Leu
		195					200					205			
Gly	Tyr	Pro	Val	Pro	Phe	Ser	Leu	Ser	Pro	Asp	Val	Arg	Arg	Lys	Asn
	210					215					220				
Leu	Glu	Ile	Tyr	Glu	Ala	Val	Thr	Ser	Pro	Gln	Gly	Pro	Ala	Met	Thr
225					230						235				240
Trp	Ser	Met	Phe	Ala	Val	Gly	Trp	Met	Glu	Leu	Lys	Asp	Ala	Val	Arg

	245		250		255
Ala Arg Gly	Leu Leu Asp Arg Ser Phe	Ala Asn Met Ala Glu	Pro Phe		
	260	265	270		
Lys Val Trp	Thr Glu Asn Ala Asp Gly	Ser Gly Ala Val Asn	Phe Leu		
	275	280	285		
Thr Gly Met	Gly Gly Phe Leu Gln Ala	Val Val Phe Gly Cys	Thr Gly		
	290	295	300		
Phe Arg Val	Thr Arg Ala Gly Val Thr	Phe Asp Pro Val Cys	Leu Ser		
305	310	315	320		
Gly Ile Ser	Arg Val Ser Val Ser Gly	Ile Phe Tyr Gln Gly	Asn Lys		
	325	330	335		
Leu Asn Phe	Ser Phe Ser Glu Asp Ser	Val Thr Val Glu Val	Thr Ala		
	340	345	350		
Arg Ala Gly	Pro Trp Ala Pro His	Leu Glu Ala Glu	Leu Trp	Pro Ser	
	355	360	365		
Gln Ser Arg	Leu Ser Leu Leu Pro Gly	His Lys Val Ser	Phe Pro	Arg	
	370	375	380		
Ser Ala Gly	Arg Ile Gln Met Ser Pro	Pro Lys Leu Pro	Gly Ser	Ser	
385	390	395	400		
Ser Ser Glu	Phe Pro Gly Arg Thr	Phe Ser Asp Val Arg	Asp Pro	Leu	
	405	410	415		
Gln Ser Pro	Leu Trp Val Thr Leu	Gly Ser Ser Ser	Pro Thr	Glu Ser	
	420	425	430		
Leu Thr Val	Asp Pro Ala Ser Glu				
	435	440			

&lt;210&gt; 5759

&lt;211&gt; 1333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5759

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120

tcctctgagc gaaaacgagc gcggataccg tccgggaagg ccggagcagc aaatggattt  
180

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240

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300

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360

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420

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480

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540

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600

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660

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 1333

&lt;210&gt; 5760

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5760

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			20					25					30		
Asp	Ser	Val	Glu	Ser	Ala	Val	Asn	Ala	Glu	Arg	Gly	Gly	Ala	Asp	Arg
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Ile	Glu	Leu	Cys	Ser	Gly	Leu	Ser	Glu	Gly	Gly	Thr	Thr	Pro	Ser	Met
	50					55				60					
Gly	Val	Leu	Gln	Val	Val	Lys	Gln	Ser	Val	Gln	Ile	Pro	Val	Phe	Val
65					70				75					80	
Met	Ile	Arg	Pro	Arg	Gly	Gly	Asp	Phe	Leu	Tyr	Ser	Asp	Arg	Glu	Ile
			85				90						95		
Glu	Val	Met	Lys	Ala	Asp	Ile	Arg	Leu	Ala	Lys	Leu	Tyr	Gly	Ala	Asp
		100					105						110		
Gly	Leu	Val	Phe	Gly	Ala	Leu	Thr	Glu	Asp	Gly	His	Ile	Asp	Lys	Glu
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Leu	Cys	Met	Ser	Leu	Met	Ala	Ile	Cys	Arg	Pro	Leu	Pro	Val	Thr	Phe
	130					135				140					
His	Arg	Ala	Phe	Asp	Met	Val	His	Asp	Pro	Met	Ala	Ala	Leu	Glu	Thr
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Leu	Leu	Thr	Leu	Gly	Phe	Glu	Arg	Val	Leu	Thr	Ser	Gly	Cys	Asp	Ser
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Ser	Ala	Leu	Glu	Gly	Leu	Pro	Leu	Ile	Lys	Arg	Leu	Ile	Glu	Gln	Ala

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1020

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<210> 5762

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5762

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Glu	Asn	Ala	Gln	Pro	Thr	Glu	Gly	Glu	Arg	Glu	Ile	Trp	Asn	Gln	Ile
		35					40					45			
Ser	Ala	Val	Leu	Gln	Asp	Ser	Glu	Ser	Ile	Leu	Ala	Asp	Leu	Gln	Ala
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65					70				75					80	
Asp	Ile	Gln	Leu	Gln	Glu	Lys	Ala	Trp	Asn	Ala	Val	Cys	Pro	Leu	Val
			85					90						95	
Val	Arg	Leu	Lys	Arg	Phe	Tyr	Glu	Phe	Ser	Ile	Arg	Leu	Glu	Lys	Ala
			100					105					110		
Leu	Gln	Ser	Leu	Leu	Glu	Ser	Leu	Thr	Cys	Pro	Pro	Tyr	Thr	Pro	Thr
		115					120					125			
Gln	His	Leu	Glu	Arg	Glu	Gln	Ala	Leu	Ala	Lys	Glu	Phe	Ala	Glu	Ile
		130				135					140				
Leu	His	Phe	Thr	Leu	Arg	Phe	Asp	Glu	Leu	Lys	Met	Arg	Asn	Pro	Ala
145					150					155				160	
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&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5764

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&lt;213&gt; Homo sapiens

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&lt;211&gt; 1910

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5767

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&lt;210&gt; 5768

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5768

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Val	Ser	Ser	Pro	His	Gln	Arg	Ala	Ser	Ala	Lys	Met	Lys	Pro	Ile	Glu		
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Glu	Gly	Ala	Glu	Asp	Asp	Asp	Asp	Val	Phe	Glu	Pro	Ala	Ser	Pro	Asn		
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Thr	Leu	Lys	Val	His	Gln	Leu	Pro										
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&lt;210&gt; 5769

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5769

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427

&lt;210&gt; 5770

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 <213> Homo sapiens

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 Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg  
 35 40 45  
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val  
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 Leu Asn Ser Cys Ile  
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<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

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Val	Arg	Cys	Ala	Thr	Pro	Pro	Gln	Leu	Ala	Asn	Gly	Val	Thr	Glu	Gly
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Asp	Leu	Ala	His	Gly	Phe	Pro	Asn	Gly	Phe	Ser	Phe	Ile	His	Gly	Gly
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His	Ile	Gln	Tyr	Gln	Cys	Phe	Pro	Gly	Tyr	Lys	Leu	His	Gly	Asn	Ser
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Lys	Gly	Phe	Lys	Leu	Leu	Gly	Leu	Ser	Glu	Ile	Thr	Cys	Glu	Ala	Asp
			180					185					190		
Gly	Gln	Trp	Ser	Ser	Gly	Phe	Pro	His	Cys	Glu	His	Thr	Ser	Cys	Gly
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Lys	Glu	Asn	Val	Ile	Thr	Ser	Cys	Arg	Ser	Gly	Tyr	Val	Ile	Gln	
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Gly	Ser	Ser	Asp	Leu	Ile	Cys	Thr	Glu	Lys	Gly	Val	Trp	Asn	Gln	Pro
				245					250					255	
Tyr	Pro	Val	Cys	Glu	Pro	Leu	Ser	Cys	Gly	Ser	Pro	Pro	Ser	Val	Ala
			260					265					270		
Asn	Ala	Val	Ala	Thr	Gly	Glu	Ala	His	Thr	Tyr	Glu	Ser	Glu	Val	Lys
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Leu	Arg	Cys	Leu	Glu	Gly	Tyr	Thr	Met	Asp	Thr	Asp	Thr	Asp	Thr	Ile
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Thr	Cys	Gln	Lys	Asp	Gly	Arg	Trp	Phe	Pro	Glu	Arg	Ile	Ser	Cys	Ser
305					310					315				320	
Pro	Lys	Lys	Cys	Pro	Leu	Pro	Glu	Asn	Ile	Thr	His	Ile	Leu	Val	His
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Gly	Asp	Asp	Phe	Ser	Val	Asn	Arg	Gln	Val	Ser	Val	Ser	Cys	Ala	Glu
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Gly	Tyr	Thr	Phe	Glu	Gly	Val	Asn	Ile	Ser	Val	Cys	Gln	Leu	Asp	Gly

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370	375	380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr		
385	390	395
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu		400
	405	410
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly		415
	420	425
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe		430
	435	440
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val		445
	450	455
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala		460
465	470	475
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys		480
	485	490
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu		495
	500	505
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg		510
	515	520
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp		525
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Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly		540
545	550	555
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln		560
	565	570
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu		575
	580	585
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro		590
	595	600
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His		605
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Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala		620
625	630	635
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&lt;210&gt; 5773

&lt;211&gt; 579

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5773

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<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
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<210> 5775

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<212> DNA

<213> Homo sapiens

<400> 5775

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<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

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 Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys  
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 Thr Pro Pro Pro Ala Pro Thr  
 355

&lt;210&gt; 5777

&lt;211&gt; 1431

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5777

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 120  
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 180  
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 300  
 gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccgt  
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 420



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 720  
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 780  
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 840  
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 900  
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 1320  
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 1380  
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 1431

&lt;210&gt; 5778

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5778

Met	Leu	Thr	Leu	Lys	Gly	Ser	Ser	Asp	Arg	Pro	Gln	Met	Gly	Met	Gly
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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
		20						25				30			
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
		35					40				45				
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
		50				55				60					
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70					75				80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85					90					95		
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro



<210> 5781  
 <211> 845  
 <212> DNA  
 <213> Homo sapiens

<400> 5781  
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 240  
 cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca  
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 360  
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 420  
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 480  
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 720  
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 840  
 ctctg  
 845

<210> 5782  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 5782  
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 Ser Arg Pro Arg Gly Ala Gly Val Arg Cys His Phe Cys Gly Val Asn  
 20 25 30  
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala  
 35 40 45  
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro  
 50 55 60  
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala  
 65 70 75 80  
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

	85		90		95										
Gly	Gln	Ala	Pro	Ala	Pro	Pro	Ala	Pro	Gly	Gln	Ala	Gly	Ser	His	Arg
	100				105								110		
Pro	Gly	Ala	Ala	Pro	Ser	Pro	Arg	Cys	Ser	Ser	Gly	Asn	His	Arg	Ser
	115					120						125			
Ser	Leu	Ala	Val	Ala	Trp	Arg	His	Gly	Thr	Trp	Ile	Gly	Gln	Pro	Pro
	130					135						140			
Pro	Cys	Pro													
145															

&lt;210&gt; 5783

&lt;211&gt; 1839

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5783

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 120  
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 180  
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 240  
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 300  
 ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt  
 360  
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 420  
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 480  
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 540  
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 660  
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 720  
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 780  
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 840  
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 960  
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 1020  
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 1080  
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 1140

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 1260  
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 1320  
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 1380  
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 1680  
 aaaaatgaaa taattttatt tgacacatta tttatatata ttctatctag gtttctcttt  
 1740  
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 1800  
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 1839

&lt;210&gt; 5784

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5784

Met	Asp	Arg	Phe	Val	Trp	Thr	Ser	Gly	Leu	Leu	Glu	Ile	Asn	Glu	Thr
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Leu	Val	Ile	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys	
		20					25					30			
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile	
		35				40					45				
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
		50				55					60				
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
65					70					75				80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
				85					90				95		
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
		100					105						110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120				125				
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
		130				135					140				
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145					150					155				160	
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
				165				170					175		
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

180 185 190  
 Glu Leu Ser Lys Ser Ile Ala Asn Lys Ile Lys Asp Lys Gln Gly Asp  
 195 200 205  
 Ile Thr Glu Asp Glu Thr Ile Arg Phe Lys Ser Tyr Leu Leu Ser Met  
 210 215 220  
 Gly Ile Ala Asn Pro Val Thr Arg Glu Thr Tyr Gly Ser Gly Thr Gln  
 225 230 235 240  
 Tyr His Met Gln Leu Ala Lys Gln Leu Ala Gly Ile Leu Gln Val Pro  
 245 250 255  
 Leu Glu Glu Arg Gly Gly Ile Met Ser Leu Thr Glu Val Tyr Cys Leu  
 260 265 270  
 Val Asn Arg Ala Arg Gly Met Glu Leu Leu Ser Pro Glu Asp Leu Val  
 275 280 285  
 Asn Ala Cys Lys Met Leu Glu Ala Leu Lys Leu Pro Leu Arg Leu Arg  
 290 295 300  
 Val Phe Asp Ser Gly Val Met Val Ile Glu Leu Gln Ser His Lys Glu  
 305 310 315 320  
 Glu Glu Met Val Ala Ser Ala Leu Glu Thr Val Ser Glu Lys Gly Ser  
 325 330 335  
 Leu Thr Ser Glu Glu Phe Ala Lys Leu Val Gly Met Ser Val Leu Leu  
 340 345 350  
 Ala Lys Glu Arg Leu Leu Leu Ala Glu Lys Met Gly His Leu Cys Arg  
 355 360 365  
 Asp Asp Ser Val Glu Gly Leu Arg Phe Tyr Pro Asn Leu Phe Met Thr  
 370 375 380  
 Gln Ser  
 385

&lt;210&gt; 5785

&lt;211&gt; 785

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5785

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 120  
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 180  
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 300  
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 360  
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 420  
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 600

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 785

<210> 5786

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5786

Met	Tyr	Thr	Ile	Ile	Asn	Gly	Pro	Ser	Lys	Leu	Val	Ala	Gln	Pro	His
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Arg	Ser	His	Ala	Ala	Ala	Gly	Glu	Gly	Pro	Ala	Pro	Gly	Ala	Pro	Glu
			20					25					30		
Lys	Pro	Ala	Ala	Arg	Ala	Ala	Asp	Leu	Ala	Ala	Pro	Ala	Gly	Ala	Ala
			35				40					45			
Leu	Ala	Gln	Pro	Leu	Gly	Pro	Trp	Pro	Leu	Ser	Ser	Ala	Gly	Pro	Arg
			50			55					60				
Leu	Val	Phe	Asn	Arg	Val	Asn	Arg	Arg	Arg	Asp	Pro	Ser	Lys	Ser	Pro
65					70					75					80
Ser	Leu	Gln	Gly	Thr	Gln	Glu	Thr	Tyr	Thr	Leu	Ala	His	Lys	Glu	Asn
				85					90					95	
Val	Arg	Phe	Val	Ser	Glu	Ala	Trp	Gln	Gln	Val	Gln	Gln	Gln	Leu	Asp
				100				105					110		
Gly	Gly	Pro	Ala	Gly	Glu	Gly	Gly	Pro	Arg	Pro	Val	Gln	Tyr	Val	Glu
			115				120					125			
Arg	Thr	Pro	Asn	Pro	Arg	Leu	Gln	Asn	Phe	Val	Pro	Ile	Asp	Leu	Asp
			130				135				140				
Glu	Trp	Trp	Ala	Gln	Gln	Phe	Leu	Ala	Arg	Ile	Thr	Ser	Cys	Ser	
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<210> 5787

<211> 1683

<212> DNA

<213> Homo sapiens

<400> 5787

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 120  
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 180  
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 240  
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 300  
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 360

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420  
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480  
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660  
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720  
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aaa  
1683

&lt;210&gt; 5788

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5788

Met Ala Val Ser Leu Thr Ala Ala Glu Thr Leu Ala Leu Gln Gly Thr



1 5 10 15  
 Gln Gly Gln Glu Lys Met Met Met Met Gly Pro Lys Glu Glu Glu Gln  
 20 25 30  
 Ser Cys Glu Tyr Glu Thr Arg Leu Pro Gly Asn His Ser Thr Ser Gln  
 35 40 45  
 Glu Ile Phe Arg Gln Arg Phe Arg His Leu Arg Tyr Gln Glu Thr Pro  
 50 55 60  
 Gly Pro Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp  
 65 70 75 80  
 Leu Arg Pro Glu Lys His Thr Lys Glu Gln Ile Leu Glu Phe Leu Val  
 85 90 95  
 Leu Glu Gln Phe Leu Thr Ile Leu Pro Glu Glu Leu Gln Ser Trp Val  
 100 105 110  
 Arg Gly His His Pro Lys Ser Gly Glu Glu Ala Val Thr Val Leu Glu  
 115 120 125  
 Asp Leu Glu Lys Gly Leu Glu Pro Glu Pro Gln Val Pro Gly Pro Ala  
 130 135 140  
 His Gly Pro Ala Gln Glu Glu Pro Trp Glu Lys Lys Glu Ser Leu Gly  
 145 150 155 160  
 Ala Ala Gln Glu Ala Leu Ser Ile Gln Leu Gln Pro Lys Glu Thr Gln  
 165 170 175  
 Pro Phe Pro Lys Ser Glu Gln Val Tyr Leu His Phe Leu Ser Val Val  
 180 185 190  
 Thr Glu Asp Gly Pro Glu Pro Lys Asp Lys Gly Ser Leu Pro Gln Pro  
 195 200 205  
 Pro Ile Thr Glu Val Glu Ser Gln Val Phe Ser Glu Lys Leu Ala Thr  
 210 215 220  
 Asp Thr Ser Thr Phe Glu Ala Thr Ser Glu Gly Thr Leu Glu Leu Gln  
 225 230 235 240  
 Gln Arg Asn Pro Lys Ala Glu Arg Leu Arg Trp Ser Pro Ala Gln Glu  
 245 250 255  
 Glu Ser Phe Arg Gln Met Val Val Ile His Lys Glu Ile Pro Thr Gly  
 260 265 270  
 Lys Lys Asp His Glu Cys Ser Glu Cys Gly Lys Thr Phe Ile Tyr Asn  
 275 280 285  
 Ser His Leu Val Val His Gln Arg Val His Ser Gly Glu Lys Pro Tyr  
 290 295 300  
 Lys Cys Ser Asp Cys Gly Lys Thr Phe Lys Gln Ser Ser Asn Leu Gly  
 305 310 315 320  
 Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Asn Glu  
 325 330 335  
 Cys Gly Lys Ala Phe Arg Trp Gly Ala His Leu Val Gln His Gln Arg  
 340 345 350  
 Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala  
 355 360 365  
 Phe Ser Gln Ser Ser Tyr Leu Ser Gln His Arg Arg Ile His Ser Gly  
 370 375 380  
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 385 390 395 400  
 Ser Glu Leu Ile Arg His Arg Arg Val His Ala Arg Lys Glu Pro Ser  
 405 410 415  
 His

<210> 5789  
<211> 1201  
<212> DNA  
<213> Homo sapiens

<400> 5789  
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240  
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360  
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&lt;400&gt; 5791

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<210> 5796

<211> 200

<212> PRT

<213> Homo sapiens

<400> 5796

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		20						25					30		
Tyr	Leu	Arg	Lys	Glu	Met	Thr	Gln	Asn	Ile	Tyr	Gln	Met	Ala	Thr	Phe
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		50				55					60				
Arg	Cys	Phe	Lys	Val	Lys	His	Asp	Ala	Leu	Lys	Thr	Tyr	Ala	Ser	Leu
65					70					75				80	
Ala	Thr	Leu	Pro	Phe	Leu	Ser	Thr	Val	Val	Thr	Asp	Lys	Leu	Phe	Val
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Arg Ser Ser Leu Ile Gly Ile Val Cys Gly Val Phe Tyr Pro Ser Ser
      115      120      125
Leu Ala Phe Thr Lys Asn Gly Arg Leu Ala Thr Lys Tyr His Thr Val
      130      135      140
Pro Leu Pro Pro Lys Gly Arg Val Leu Ile His Trp Met Thr Leu Cys
      145      150      155      160
Gln Thr Gln Met Lys Leu Met Ala Ile Pro Leu Val Phe Gln Ile Met
      165      170      175
Phe Gly Ile Leu Asn Gly Leu Tyr His Tyr Ala Val Phe Glu Glu Thr
      180      185      190
Leu Glu Lys Thr Ile His Glu Glu
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&lt;210&gt; 5797

&lt;211&gt; 405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5797

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&lt;210&gt; 5798

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5798

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20      25      30
Arg Arg Val Glu Gly Ser Arg Asp Gln Ala Trp Pro Leu Gln Thr Phe
35      40      45
Ser Gln Arg Asn Tyr Arg Ser Leu Ser Leu Tyr Cys Trp Leu Ala Arg
50      55      60
Glu Gly Arg Thr Ser Ser Tyr Gln Gly Asn Gln Gly Ser Leu Arg Pro
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<211> 4261  
<212> DNA  
<213> Homo sapiens

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&lt;210&gt; 5800

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5800

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 Val Leu Glu Asn Ala Gly Ser Val Gly Leu Ala Leu Ile Val Trp Ile  
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 165 170 175  
 Cys Ser Ser Val Arg Trp Ala Thr Arg Val Gln Asp Ile Phe Thr Ala  
 180 185 190  
 Gly Lys Leu Leu Ala Leu Ala Leu Ile Ile Ile Met Gly Ile Val Gln  
 195 200 205  
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 210 215 220  
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 Tyr Thr Leu Ile Asn Tyr Val Gly Phe Ile Asn Tyr Leu Phe Tyr Gly  
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 Pro Arg Pro Ile Lys Ile Asn Leu Leu Phe Pro Ile Ile Tyr Leu Leu  
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 Phe Trp Ala Phe Leu Leu Val Phe Ser Leu Trp Ser Glu Pro Val Val  
 435 440 445  
 Cys Gly Ile Gly Leu Ala Ile Met Leu Thr Gly Val Pro Val Tyr Phe

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				485						490					495
Glu	Val	Glu	Arg	Gly	Ser	Gly	Thr	Glu	Glu	Ala	Asn	Glu	Asp	Met	Glu
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Glu	Gln	Gln	Gln	Pro	Met	Tyr	Gln	Pro	Thr	Pro	Thr	Lys	Asp	Lys	Asp
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 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 5802

&lt;211&gt; 350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5802

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Phe	Glu	Lys	Val	Pro	Leu	Phe	Met	Ser	Arg	Ala	Pro	Ser	Glu	Ile	Asp
		35					40					45			
Pro	Arg	Glu	Asn	Pro	Asp	Leu	Ala	Cys	Leu	Gln	Ser	Ile	Ile	Phe	Asp
		50				55				60					
Glu	Glu	Arg	Ser	Pro	Glu	Glu	Gln	Ala	Lys	Thr	Tyr	Lys	Asp	Glu	Gly
65					70					75				80	
Asn	Asp	Tyr	Phe	Lys	Glu	Lys	Asp	Tyr	Lys	Lys	Ala	Val	Ile	Ser	Tyr
			85					90					95		
Thr	Glu	Gly	Leu	Lys	Lys	Lys	Cys	Ala	Asp	Pro	Asp	Leu	Asn	Ala	Val
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Ser	Ala	Leu	Asn	Asp	Val	Thr	Ala	Ala	Arg	Lys	Leu	Lys	Pro	Cys	His
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Leu	Lys	Ala	Ile	Ile	Arg	Gly	Ala	Leu	Cys	His	Leu	Glu	Leu	Lys	His
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Glu	Arg	Asn	Gln	Asn	Glu	Ala	Leu	Leu	Gln	Ala	Ile	Lys	Ala	Arg	Asn
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His	Glu	Asp	Ser	Arg	Phe	Ile	Asp	His	Leu	Met	Val	Met	Phe	Gly	Glu
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Thr	Pro	Ser	Trp	Asp	Leu	Glu	Gln	Lys	Tyr	Cys	Leu	Ile	Ile	Trp	Arg
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&lt;211&gt; 692

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5803

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120

ggagtgaatt tggaccaaac tgtaaaggaa tttatcgtat ttctaaagca agatgtccct  
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 ctccctgctga aagaagacag cactctgaaa gcagctggaa tcgccagtga aactgaaatt  
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<210> 5804

<211> 126

<212> PRT

<213> Homo sapiens

<400> 5804

Met	Ala	Pro	Gly	Glu	Val	Thr	Ile	Thr	Val	Arg	Leu	Ile	Arg	Ser	Phe
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Glu	His	Arg	Asn	Phe	Lys	Pro	Val	Val	Tyr	His	Gly	Val	Asn	Leu	Asp
			20					25				30			
Gln	Thr	Val	Lys	Glu	Phe	Ile	Val	Phe	Leu	Lys	Gln	Asp	Val	Pro	Leu
		35					40					45			
Arg	Thr	Asn	Leu	Pro	Pro	Pro	Phe	Arg	Asn	Tyr	Lys	Tyr	Asp	Ala	Leu
		50				55				60					
Lys	Ile	Ile	His	Gln	Ala	His	Lys	Ser	Lys	Thr	Asn	Glu	Leu	Val	Leu
				70					75					80	
Ser	Leu	Glu	Asp	Asp	Glu	Arg	Leu	Leu	Leu	Lys	Glu	Asp	Ser	Thr	Leu
			85						90					95	
Lys	Ala	Ala	Gly	Ile	Ala	Ser	Glu	Thr	Glu	Ile	Ala	Phe	Phe	Cys	Glu
			100					105						110	
Glu	Asp	Tyr	Arg	Asn	Tyr	Lys	Ala	Asn	Pro	Ile	Ser	Ser	Trp		
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<210> 5805

<211> 1112

<212> DNA

<213> Homo sapiens

<400> 5805

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 120

aaggccatcc ttgcgggggc tgaggccgat ctctccatg ggctgagtgc tcagtggaga  
180  
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240  
acggcgagcg cccggtgtcc gcactcggcc gcctgccgtg cccgtctgcg cccgtgtcat  
300  
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420  
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480  
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1080  
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1112

&lt;210&gt; 5806

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5806

Met	Ser	Ile	Tyr	Phe	Pro	Ile	His	Cys	Pro	Asp	Tyr	Leu	Arg	Ser	Ala
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Lys	Met	Thr	Glu	Val	Met	Met	Asn	Thr	Gln	Pro	Met	Glu	Glu	Ile	Gly
		20						25					30		
Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
		35					40					45			
Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
	50					55				60					
Val	Val	Glu	Pro	Thr	Glu	Gly	Glu	Val	Glu	Ser	Gly	Glu	Leu	Arg	Trp
65					70				75					80	
Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
				85				90						95	
Glu	Thr	Ala	Lys	Glu	Asn	Lys	Glu	Gln							

100

105

&lt;210&gt; 5807

&lt;211&gt; 1429

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5807

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180  
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240  
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300  
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360  
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420  
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480  
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540  
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660  
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720  
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840  
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900  
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1429

<210> 5808  
<211> 261  
<212> PRT  
<213> Homo sapiens

<400> 5808  
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20 25 30  
Leu Leu Gly Gly Ile Pro Glu Ser Gly Gly Pro Asp Ala Arg Gln Gly  
35 40 45  
Trp Leu Ala Ala Leu Gln Asp Arg Ser Ile Leu Ala Pro Leu Ala Trp  
50 55 60  
Asp Leu Gly Leu Leu Leu Phe Val Gly Gln His Ser Leu Met Ala  
65 70 75 80  
Ala Glu Arg Val Lys Ala Trp Thr Ser Arg Tyr Phe Gly Val Leu Gln  
85 90 95  
Arg Ser Leu Tyr Val Ala Cys Thr Ala Leu Ala Leu Gln Leu Val Met  
100 105 110  
Arg Tyr Trp Glu Pro Ile Pro Lys Gly Pro Val Leu Trp Glu Ala Arg  
115 120 125  
Ala Glu Pro Trp Ala Thr Trp Val Pro Leu Leu Cys Phe Val Leu His  
130 135 140  
Val Ile Ser Trp Leu Leu Ile Phe Ser Ile Leu Leu Val Phe Asp Tyr  
145 150 155 160  
Ala Glu Leu Met Gly Leu Lys Gln Val Tyr Tyr His Val Leu Gly Leu  
165 170 175  
Gly Glu Pro Leu Ala Leu Lys Ser Pro Arg Ala Leu Arg Leu Phe Ser  
180 185 190  
His Leu Arg His Pro Val Cys Val Glu Leu Leu Thr Val Leu Trp Val  
195 200 205  
Val Pro Thr Leu Gly Thr Asp Arg Leu Leu Leu Ala Phe Leu Leu Thr  
210 215 220  
Leu Tyr Leu Gly Leu Ala His Gly Leu Asp Gln Gln Asp Leu Arg Tyr  
225 230 235 240  
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Asp Gly Glu Ala Glu  
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<210> 5809  
<211> 2009  
<212> DNA  
<213> Homo sapiens

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120

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 1920  
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 1980  
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 2009

<210> 5810

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5810

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Gly	Gly	Gln	Trp	Arg	Asp	Leu	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly
		20					25					30			
Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	His	Tyr	Lys
	35					40					45				
His	Pro	Thr	Pro												
	50														

<210> 5811

<211> 1607

<212> DNA

<213> Homo sapiens

<400> 5811

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 240  
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 300  
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 660



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 1607

&lt;210&gt; 5812

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5812

Trp	Trp	Cys	Trp	Leu	Asp	Val	Gly	Gly	Phe	Thr	Gly	Pro	Ala	Val	Ser
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Glu	Arg	Ser	His	Ala	Val	Ile	Arg	Ser	Leu	Glu	Ala	Ala	Asp	Leu	Pro
			20					25					30		
Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
			35				40						45		
Pro	Ser	Arg	Met	Gln	Met	Pro	Gln	Gly	Asn	Pro	Leu	Leu	Leu	Ser	His
			50			55					60				
Thr	Leu	Gln	Glu	Leu	Leu	Ala	Arg	Asp	Thr	Val	Gln	Val	Glu	Leu	Ile
65				70					75					80	
Pro	Glu	Lys	Lys	Gly	Leu	Phe	Leu	Lys	His	Val	Glu	Tyr	Glu	Val	Ser
			85					90						95	
Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
			100					105					110		
Val	Phe	Gln	Glu	Met	Leu	Leu	His	Lys	Phe	Pro	Tyr	Arg	Met	Val	Pro

115 120 125  
 Ala Leu Pro Pro Lys Arg Met Leu Gly Ala Asp Arg Glu Phe Ile Glu  
 130 135 140  
 Ala Arg Arg Arg Ala Leu Lys Arg Phe Val Asn Leu Val Ala Arg His  
 145 150 155 160  
 Pro Leu Phe Ser Glu Asp Val Val Leu Lys Leu Phe Leu Ser Phe Ser  
 165 170 175  
 Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly  
 180 185 190  
 Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu  
 195 200 205  
 Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg  
 210 215 220  
 Asn Ile Tyr Asn Ser Phe His Lys Leu Arg Asp Arg Ala Glu Arg Ile  
 225 230 235 240  
 Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp Leu Leu Ile Phe Gly Lys  
 245 250 255  
 Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr Pro Leu Pro Ser Trp Ala  
 260 265 270  
 Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly  
 275 280 285  
 Leu Ser Val Glu Phe Ala Leu Leu Ala Asp Lys Ala Ala Gln Gln Gly  
 290 295 300  
 Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp  
 305 310 315 320  
 Leu Leu Gln Ser Tyr Lys Asp Leu Cys Glu Arg His Glu Lys Gly Val  
 325 330 335  
 Leu His Lys His Gln Arg Ala Leu His Lys Tyr Ser Leu Met Lys Arg  
 340 345 350  
 Gln Met Met Ser Ala Thr Ala Gln Asn Arg Glu Pro Glu Ser Val Glu  
 355 360 365  
 Gln Leu Glu Ser Arg Ile Val Glu Gln Glu Asn Ala Ile Gln Thr Met  
 370 375 380  
 Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys Leu His Gln Glu Thr Gln  
 385 390 395 400  
 Leu Ile His Val Tyr Leu Pro Leu Thr Ser His Ile Leu Arg Ala Phe  
 405 410 415  
 Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn  
 420 425 430  
 Asp Leu Arg Pro Lys Leu Ser Cys Leu Phe Ala Gly Pro His Ser Thr  
 435 440 445  
 Leu Thr Pro Pro Cys Ser Pro Pro Glu Asp Gly Leu Cys Pro His  
 450 455 460

&lt;210&gt; 5813

&lt;211&gt; 2991

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5813

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 120

ttcccatttc aaggctgatt ctgatgatga taatgtttta gtagcattga ttgttctcta  
180  
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240  
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300  
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<210> 5814

<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

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Tyr	His	Pro	Asp 20	Lys	His	Arg	Asp 25	Pro	Glu	Leu	Lys	Ser	Gln 30	Ala	Glu
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

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          35          40          45
Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met
   50          55          60
Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
  65          70          75          80
Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Arg Arg Leu Gln
          85          90          95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
   100          105          110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
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Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro
   130          135          140
Val Ser His Glu His
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<210> 5815  
 <211> 590  
 <212> DNA  
 <213> Homo sapiens

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120
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180
agtctcttta gttttgggct tgtagatgat gccaccatc tcatcaatgc cctccgacag
240
cagagtataa cccttcatct tgttgatgtc atgccgggtcc tcatcacgct ttcttcgctt
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360
gccctccagc ttccaacaa gggacagcac ctctcctgtg ggttcatccc ggcgggtccg
420
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480
cagactacgg gcggttacat ccgccatggc cgcggctgct cggaggcttc agaccaccac
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<210> 5816  
 <211> 196  
 <212> PRT  
 <213> Homo sapiens

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<400> 5816
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Ala Ala Asp Glu Val Leu Ala Val Leu Lys Asn Glu Lys Leu Arg Asp
   20          25          30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

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<210> 5818
<211> 191
<212> PRT
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&lt;213&gt; Homo sapiens

&lt;400&gt; 5818

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Met Gly Gln Leu Gln Asn Lys Glu Asn Asn Asn Thr Lys Asp Ser Pro
 1           5           10           15
Ser Arg Gln Cys Ser Trp Asp Lys Ser Glu Ser Pro Gln Arg Ser Ser
          20           25           30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
      35           40           45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
    50           55           60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65           70           75           80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
          85           90           95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
        100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
      115          120          125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
    130          135          140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145          150          155          160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
      165          170          175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
    180          185          190

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&lt;210&gt; 5819

&lt;211&gt; 1652

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5819

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180
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300
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360
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420
aaagttcata aggggactgt gccaagaat gacgcagatg atgaatccga gactcctgaa
480
gaactggaag aagagattcc tgtggtgatt tgtgctgcag caggaggat gggtgccact
540
atggctgcca tcaatagcat ctacagcaac cctgacgcca acatcttggt ctatgtagtg
600

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 720  
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 840  
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 1620  
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 1652

&lt;210&gt; 5820

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5820

Met Ala Leu Leu Arg Lys Ile Asn Gln Val Leu Leu Phe Leu Leu Ile  
 1 5 10 15  
 Val Thr Leu Cys Val Ile Leu Tyr Lys Lys Val His Lys Gly Thr Val  
 20 25 30  
 Pro Lys Asn Asp Ala Asp Asp Glu Ser Glu Thr Pro Glu Glu Leu Glu  
 35 40 45  
 Glu Glu Ile Pro Val Val Ile Cys Ala Ala Ala Gly Arg Met Gly Ala  
 50 55 60  
 Thr Met Ala Ala Ile Asn Ser Ile Tyr Ser Asn Pro Asp Ala Asn Ile  
 65 70 75 80  
 Leu Phe Tyr Val Val Gly Leu Arg Asn Thr Leu Thr Arg Ile Arg Lys



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<210> 5821
<211> 3292
<212> DNA
<213> Homo sapiens
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120
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180
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240
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660
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 3292

&lt;210&gt; 5822

&lt;211&gt; 712

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5822

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			20					25				30			
His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
			35				40					45			
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
			50				55				60				
Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
65					70					75				80	
Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
			85					90						95	
Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

Glu	Ser	Lys	Leu	Lys	Ile	Asn	Leu	Phe	Glu	Lys	Glu	Lys	Glu	Met	Lys	
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Lys	Ser	Pro	Thr	Ser	Leu	Lys	Arg	Glu	Thr	Tyr	Tyr	Leu	Ser	Asp	Ser	
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Pro	Leu	Leu	Gly	Pro	Pro	Val	Gly	Glu	Pro	Arg	Leu	Leu	Ala	Ser	Ser	
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Pro	Ala	Leu	Pro	Ser	Ser	Gly	Ala	Gln	Ala	Arg	Leu	Thr	Arg	Ala	Pro	
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Gly	Pro	Pro	His	Ser	Ala	His	Ala	Leu	Pro	Arg	Glu	Ser	Cys	Thr	Ala	
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His	Ala	Ala	Ser	Gln	Ala	Ala	Thr	Gln	Arg	Lys	Pro	Gly	Thr	Lys	Leu	
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Leu	Leu	Pro	Arg	Ala	Ala	Ser	Val	Arg	Gly	Arg	Ser	Ile	Pro	Gly	Ala	
	210					215					220					
Ala	Glu	Lys	Pro	Lys	Lys	Glu	Ile	Pro	Ala	Ser	Pro	Ser	Arg	Thr	Lys	
225					230					235					240	
Ile	Pro	Ala	Glu	Lys	Glu	Ser	His	Arg	Asp	Val	Leu	Pro	Asp	Lys	Pro	
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Ala	Pro	Gly	Ala	Val	Asn	Val	Pro	Ala	Ala	Gly	Ser	His	Leu	Gly	Gln	
			260					265					270			
Gly	Lys	Arg	Ala	Ile	Pro	Val	Pro	Asn	Lys	Leu	Gly	Leu	Lys	Lys	Thr	
		275					280					285				
Leu	Leu	Lys	Ala	Pro	Gly	Ser	Thr	Ser	Asn	Leu	Ala	Arg	Lys	Ser	Ser	
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Ser	Gly	Pro	Val	Trp	Ser	Gly	Ala	Ser	Ser	Ala	Cys	Thr	Ser	Pro	Ala	
305				310						315					320	
Val	Gly	Lys	Ala	Lys	Ser	Ser	Glu	Phe	Ala	Ser	Ile	Pro	Ala	Asn	Ser	
				325				330						335		
Ser	Arg	Pro	Leu	Ser	Asn	Ile	Ser	Lys	Ser	Gly	Arg	Met	Gly	Pro	Ala	
			340					345					350			
Met	Leu	Arg	Pro	Ala	Leu	Pro	Ala	Gly	Pro	Val	Gly	Ala	Ser	Ser	Trp	
		355					360					365				
Gln	Ala	Lys	Arg	Val	Asp	Val	Ser	Glu	Leu	Ala	Ala	Glu	Gln	Leu	Thr	
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Ala	Pro	Pro	Ser	Ala	Ser	Pro	Thr	Gln	Pro	Gln	Thr	Pro	Glu	Gly	Gly	
385					390					395					400	
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			405					410						415		
Asn	Lys	Thr	Arg	Ser	Ile	Arg	Arg	Arg	Asp	Ser	Cys	Leu	Asn	Ser	Lys	
			420					425					430			
Thr	Lys	Val	Met	Pro	Thr	Pro	Thr	Asn	Gln	Phe	Lys	Ile	Pro	Lys	Phe	

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 Ser Ala Met Arg Thr Glu Pro Thr Arg Glu Ser Asn Arg Lys Thr Asp  
 545                      550                      555                      560  
 Ser Arg Leu Val Asp Val Ser Pro Asp Arg Gly Ser Pro Pro Ser Arg  
                     565                      570                      575  
 Val Pro Gln Ala Leu Asn Phe Ser Pro Glu Glu Ser Asp Ser Thr Phe  
                     580                      585                      590  
 Ser Lys Ser Thr Ala Thr Glu Val Ala Arg Glu Glu Ala Lys Pro Gly  
                     595                      600                      605  
 Gly Asp Ala Ala Pro Ser Glu Ala Leu Leu Val Asp Ile Lys Leu Glu  
                     610                      615                      620  
 Pro Leu Ala Val Thr Pro Asp Ala Ala Ser Gln Pro Leu Ile Asp Leu  
 625                      630                      635                      640  
 Pro Leu Ile Asp Phe Cys Asp Thr Pro Glu Ala His Val Ala Val Gly  
                     645                      650                      655  
 Ser Glu Ser Arg Pro Leu Ile Asp Leu Met Thr Asn Thr Pro Asp Met  
                     660                      665                      670  
 Asn Lys Asn Val Ala Lys Pro Ser Pro Val Val Gly Gln Leu Ile Asp  
                     675                      680                      685  
 Leu Ser Ser Pro Leu Ile Gln Leu Ser Pro Glu Ala Asp Lys Glu Asn  
                     690                      695                      700  
 Val Asp Ser Pro Leu Leu Lys Phe  
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&lt;210&gt; 5823

&lt;211&gt; 2585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5823

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